

4.4 SWMU GROUP C: SWMUs 7, 8, 9, AND 11

SWMU Group C consists of SWMU 7: Fill Materials in Block 21, SWMU 8: All Purpose Burning Pit, 9: Residue Fill Area 3Fe, and SWMU 11:Block 21 Acid Neutralization Facility 5Fg. These units were grouped based on proximity and similar Phase 2 analytical data. These SWMUs are described as follows:

SWMU 7: Fill Materials, Block 21

Fill materials in Block 21 were described in soil borings drilled for foundation investigations as "plant residue". Fill was encountered up to 12.5 ft-bgs.

SWMU 8: ALL PURPOSE BURNING PIT

The all purpose burning pit was constructed in 1966 and demolished in 1968 or 1969 to provide a site for the solids incinerator. No demolition details are available.

Located on the west side of Block 21 approximately 80 feet north of the TDA Residue Incinerator, the "All Purpose Burning Pit" was a pit (21 feet by 10 feet by 10 feet deep) lined with reinforced concrete blocks and 4 inch fire brick. A fuel oil burner was used to incinerate wastes at this location. Previous reports indicate that a variety of wastes were incinerated during operation including: polyurethane precursors; polyurethane and their solvents, by-products, and raw materials; intermediates, raw materials, and residues from the production of polycarbonate resin and iron oxide pigments; common trash; wood; laboratory waste; and product residue. This area is located in the 100-year floodplain and is now a gravel parking lot for tank trucks and is contained within SWMU 7. A gasoline tank was installed and later removed from this area, however, dates of installation and removal were not available. Drawings indicate that no surface runoff controls were used. There were no releases reported.

SWMU 9: Residue Fill Area Unit 3Fe

This fill area was located in the northeast corner of Block 21, within SWMU 7. It was used for approximately 6 months. No information is available as to the volume of material stored here nor where it was placed after the 6-month period. The fill may have included residue from TDI production.

SWMU 11: Block 21 Acid Neutralization Facility 5Fg

The acid neutralization facility was installed in 1970 and excavated and backfilled in 1979. This SWMU is located in the northeast corner of Block 21 and was approximately 13 feet by 45 feet

by 7 feet deep. This unit was lined with acid resistant brick and cement grout and was probably filled with limestone to treat wastewater flowing in the wastewater ditch. Previous reports indicate the unit was excavated prior to backfilling. This SWMU is located within SWMU 7 and immediately adjacent to SWMU 10 (included in SWMU Group D).

4.4.1 RFI Scope of Work

The RFI scope of work at this SWMU group consisted of soil gas and geophysical surveys performed during Phase 1 and soil sampling performed during Phases 2 and 3.

4.4.1.1 Phase 1 Scope of Work

Soil Gas Survey

A soil gas survey was conducted at SWMU Group C (SWMUs 7, 8, 9 and 11) in the fall of 1996 (ICF Kaiser, 1997). Numerous soil gas samples were collected in and around SWMU Group C at 2.5 and 7.5 ft-bgs at the locations illustrated in Figures C-5 and C-6 of Appendix C. Total VOC concentrations in soil gas are considered to be elevated if found above 100 µg/L. This is considered to be a conservative cut-off value and was derived after several years of comparing actual soil chemistry results with soil gas results.

VOC concentrations totaling more than 1,000 µg/L were encountered in the southern portion of SWMU Group C at both the 2.5 ft-bgs and the 7.5 ft-bgs levels. The soil gas survey also indicates that VOCs exist beyond the current SWMU Group C boundary; however, the highest concentrations were encountered within the portion of SWMU Group C lying within Block 21. The total VOC concentrations at 2.5 ft-bgs are comprised primarily of vinyl chloride (maximum concentration of 6,050 µg/L) and chlorobenzene (maximum concentration of 4,240 µg/L) with smaller amounts of benzene, hydrocarbon, toluene, and trichloroethene.

The total VOC concentrations for the 7.5 ft-bgs interval in SWMU Group C are generally distributed over the same area as the 2.5 ft-bgs interval. The major constituents are chlorobenzene (maximum concentration of 1,135 µg/L), vinyl chloride (maximum concentration of 3,930 µg/L), and hydrocarbons (maximum concentration of 4,457 µg/L). Boring SM007-5 SG-061, the soil gas point with the highest measured concentration of vinyl chloride, was extended to 15 ft-bgs without encountering perched groundwater. The vinyl chloride concentration was measured to be 6,880 µg/L at 15 ft-bgs.

The soil gas analysis also identified a small area of elevated total VOCs in the northern end of SWMU 7 (Block 22) that consisted primarily of hydrocarbons (maximum concentration of 2,250 µg/L) and chlorobenzene (maximum concentration of 800 µg/L). This localized around a large above ground storage tank.

Although SWMU 8 was located in an area of elevated soil gas concentrations, the soil gas concentration in the vicinity of SWMUs 9 and 11 were not elevated.

Ground Penetrating Radar Survey

Several GPR traverses were conducted in the vicinity of SWMU Group C. The GPR data produced one anomalous reflector located between a large roofed structure and a truck parking lot (Figure B-3 in Appendix B). The anomalous reflector resembled a small sump-like structure approximately 20 feet wide (north and south edges). The north, south, and eastern limit was defined in the GPR data, however, the western limit of this structure was not defined by the data. Reflection patterns typical of concrete with rebar occur in the data at the bottom of the anomalous feature. The limits of the anomaly were painted on the ground surface in the field. Based on the location of this feature, it may be a remnant of SWMU 11. No other notable features were detected in the GPR data of this area.

4.4.1.2 Phase 2 Scope of Work

The scope of work for Phase 2 was based on the findings of the previous investigation work and on the Work Plan. Sixteen test borings were installed for the purpose of collecting samples for laboratory and geotechnical analysis for the fill materials area.

Test borings in SWMU Group C were drilled to depths ranging from 9 to 24 ft-bgs. Samples were collected from each boring at the surface (0 to 1 or 2 ft-bgs) and the shallow subsurface (3 to 5 ft-bgs). Additional samples were taken from areas with elevated OVM readings and the two-foot interval above groundwater. The samples were submitted for analysis of SVOCs, metals, VOCs and TOCs. Table 4.4-1 presents the complete soil analytical results for SWMU Group C and Figure 4.4-1 provides selected soil analytical results on a plan view map.

Shelby Tube samples for geotechnical analysis were collected from twin borings drilled beside SM007-TB01, SM007-TB04, SM008-TB01, SM009-TB02, and SM011-TB01. Samples taken from the 0 to 2.5 ft-bgs were collected for sieve and hydrometer analysis. Geotechnical samples from other depths were collected for sieve and hydrometer, moisture content, and permeability analyses. The following geotechnical samples were collected from these borings as follows:

SM007-TB01 (0-2.5 ft-bgs), SM007-TB04 (0-2.5, 3-5, and 5-7 ft-bgs), SM008-TB01 (0-2.5, 3-5, and 14-16 ft-bgs), SM009-TB02 (0-2.5, 3-5, and 12-14 ft-bgs), and SM011-TB01 (0-2.5, and 5-7 ft-bgs).

4.4.1.3 Phase 3 Scope of Work

The Phase 3 scope of work consisted of additional samples from four new boring locations (SM007-TB12, SM007-TB007-TB13, SM007-TB14, and SM007-TB15) and the resampling for SVOCs from the 0-1 ft-bgs interval of SM007-TB06, SM007-TB07, and SM007-TB08. Soil samples were collected at the surface (0 to 1 or 2 ft-bgs) and the shallow subsurface (3 to 5 ft-bgs) in each of the borings. Additional soil samples were taken from intervals with elevated OVM readings, when present, and the two-foot interval above groundwater. The samples were submitted for analysis of VOCs, SVOCs, and metals.

4.4.2 Field Observations

The boring logs for SWMU Group C (Appendix D) indicate that subsurface materials encountered during the RFI sampling consist of gravel, sand, sandy silts, silty to sandy clays, and TDI residue mixed with other wastes. Table 4.4-2 summarizes the field observations for the test borings in SWMU Group C.

SWMU 7 Soil Borings

Test Borings SM007-TB01, -TB06, -TB07, and -TB08 were drilled through asphalt into a gravel subbase typically 1.5 to 3 feet thick. All other borings were drilled through gravel prior to encountering dark gray to brown silty to sandy clays, or brown sands and sandy silts. The sediments were used as fill material and vary in thickness and vertical sequence.

TDI residue was observed in borings SM007-TB02, -TB03, -TB04, and -TB06, ranging in thickness from 0.5 to 2 feet. In test boring SM007-TB06, the TDI occurred in small amounts with glass fragments and ashes in sand fill. Test Boring SM007-TB04 encountered a black, tar-like substance mixed with the TDI residue. OVM screening indicated that there were elevated levels of organic vapors in this interval.

Other types of waste encountered at SWMU 7 include crushed concrete, glass fragments, ash, and nails. The waste appeared from 7 to 9 ft-bgs in SM007-TB03 and from 9 to 11 ft-bgs in SM007-TB06, -TB07, and -TB08. OVM screening indicated that there were elevated levels of organic vapors at the waste interval in SM007-TB04.

Four test borings (SM007-TB01, -TB02, -TB06, and -TB08) encountered perched groundwater between 7.9 and 16.4 ft-bgs. All test borings, with the exception of SM007-TB04, encountered the alluvial aquifer. Test boring SM005-TB04 met refusal at 9 ft-bgs after penetrating a 2-foot section of TDI residue mixed with a tar-like substance.

Four borings were installed at new locations within SWMU 7 as part of the Phase 3 scope of work: SM007-TB12 through -TB15. Traces of TDI residue and brick fragments were identified in SM007-TB14 and SM007-TB13, respectively. OVM readings in the 1 to 9 ppm range were recorded for all the Phase 3 soil samples from this unit; however, the recorded OVM readings for SM007-TB15 were as high as 33 ppm.

SWMU 8 Soil Borings

The boring log for SM008-TB01 (Appendix D) indicates that subsurface materials encountered consist of gravel and sandy silts mixed with other wastes (creosote impregnated wood). Test boring SM008-TB01 was drilled through a gravel surface 1 foot thick before encountering a medium sized gravel with coarse sand, which continued from 1 to 13.5 ft-bgs. The gravel and sand was underlain by brown sandy silt from 13.5 to the total depth of 17 ft-bgs.

A piece of creosote impregnated wood was encountered from 7 to 9 ft-bgs. This interval also exhibited an elevated level of organic vapors.

SWMU 9 Soil Borings

The boring logs for SWMU 9 (Appendix D) indicate that subsurface materials encountered during Phase 2 consist of gravel, sandy silts, and silty to sandy clays, with minor amounts of sand and TDI residue. All test borings drilled through 1 to 13.5 feet of gravel before encountering sandy silt or silty to sandy clay.

Test borings SM009-TB01 and SM009-TB02 penetrated a light brown sandy silt beneath the gravel that ranged from 2 to 5 feet thick. The horizon of silty sand was not observed in test boring SM009-TB03, where a section of dark brown silty clay was observed instead. TDI residue was found within a small horizon in SM009-TB03, from 12.3 to 13 ft-bgs.

SWMU 11 Soil Borings

Following the completion of the land surveying, it was realized that test boring SM011-TB01 is offset from the small footprint of SWMU 11. However, test boring SM007-TB10 is located in the center of SWMU 11. This boring was used to evaluate SWMU 11 instead of SM011-TB01.

Test boring SM007-TB10 was drilled to a depth of 18 ft-bgs. The boring log for SM007-TB10 (Appendix D) indicates that subsurface materials encountered during Phase 2 also consist of gravel mixed with sandy silt from 0 to 16.5 ft-bgs and are underlain by light brown sandy silt from 16.5 to 18 ft-bgs.

OVM screening detected low levels of organic vapors in boring SM007-TB10 at the groundwater interface from 17 to 18 ft-bgs (28 ppm). SM007-TB10 also had an elevated organic vapor reading from 12 to 17 ft-bgs of 173 ppm. This interval had poor sample recovery and had to be taken twice.

4.4.3 Risk Assessment Results

Table 4.4-1 provides complete analytical results for SWMU Group C. Tables 4.4-3 and Table 4.4-4 present a summary of the constituents screened in soil at all depths respectively at SWMU Group C. The screening tables identify constituents with detections and/or detection limits exceeding either the Region III industrial and residential RBCs or the USEPA SSLs. The maximum detected concentrations, the maximum detection limits, the frequency of detection, and a comparison of the detected concentrations and detection limits to the screening criteria are also presented in Tables 4.4-3 and 4.4-4.

4.4.3.1 Comparison to Risk Based Criteria

As indicated on Table 4.4-3, there are seven organics and one inorganic with maximum detected concentrations exceeding the Region III RBCs for industrial soil and twenty-eight organics with maximum detection limits exceeding the Region III RBCs for industrial soil. Additionally, there are fifteen organics and three inorganics with maximum detected concentrations exceeding the Region III RBCs for residential soil and forty-five organics with maximum detection limits exceeding the Region III RBCs for residential soil.

USEPA SSLs were compared to maximum detected concentrations and maximum detection limits in soils at all depths in Table 4.4-4. As indicated on the table, there are sixteen organics and three inorganics with maximum detected concentrations exceeding the USEPA SSLs. Additionally, there are sixty-two organics with maximum detection limits exceeding the USEPA SSLs. All constituents whose maximum detected concentrations exceed the USEPA SSL were evaluated further in a comparison to site-specific SSLs. This comparison is discussed in Section 4.4.3.2.

All constituents whose maximum detected concentrations or maximum detection limit exceeds the Region III RBC for industrial soil were evaluated separately in the screening risk-assessments for the 0-2 feet and the 0-5 feet soil depth intervals. These screening assessments are discussed below and are presented in Tables 4.4-5 and 4.4-6, respectively.

As indicated on Table 4.4-5, only one constituent (2,4-toluenediamine) was detected at a concentration that exceeded the Region III RBCs for industrial soil at 0-2 feet in depth. Sixteen constituents had detection limits that exceeded the Region III RBCs for industrial soil at 0-2 feet in depth. As indicated on Table 4.4-6, the same constituent (2,4-toluenediamine) was detected at a concentration exceeding the Region III RBC for industrial soil at 0-5 feet in depth. Seventeen constituents had detection limits that exceeded the Region III RBCs for industrial soil at 0-5 feet in depth.

Generally, detection limits that exceeded respective Region III Industrial Soil RBCs were elevated, as identified in samples SM007-TB08-0001 and SM007-TB06-0001 for 0-2 feet soil and in samples SM007-TB02-0305 and SM007-TB06-0001 for 0-5 feet soil. Exceptions were the non-elevated detection limits of 2,4-toluenediamine, benzidine, benzo(a)pyrene, and 1,2-dibromoethane, which exceeded their respective Region III Industrial Soil RBCs in 0-2 feet soil, and benzidine and 1,2-dichloroethane, which exceeded their respective Region III Industrial Soil RBCs in 0-5 feet soil.

Constituents of Interest were limited to 2,4-toluenediamine. This constituent was identified as a COI for both the 0-2 and the 0-5 feet intervals based on the maximum detections exceeding the respective Region III RBC. This COI is evaluated further in the risk assessment because it is related to processes at the Bayer New Martinsville facility and was detected in three out of sixteen samples collected at SWMU Group C in the 0-2 feet depth interval, and in five out of twenty eight samples collected at SWMU Group C in the 0-5 feet depth interval.

Several constituents in both the 0-2 feet depth interval and the 0-5 feet depth interval had detection limits that exceeded their respective Region III RBC for industrial soil. These constituents were not identified as COIs and are not evaluated further in the risk assessment. Of these constituents, 1,2-dibromoethane, 1,2,3-trichloropropane, hexachlorobenzene, dibenz(a,h)anthracene, n-nitroso-dibutylamine, n-nitroso-di-n-propylamine, n-nitroso-dimethylamine, heptachlor, and benzidine were not detected at the SWMU Group and they were not detected at any depth in any soils site-wide. These constituents are not related to any process

at the Bayer New Martinsville facility (Bayer, 2000). The remaining constituents (3,3'-dichlorobenzidine, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, bis(2-chloroethyl)ether, indeno(1,2,3-cd)pyrene, and o,p-toluidine) were detected at least once in site-wide soils at any depth, and their detection limits at SWMU Group C exceed their respective Region III RBCs. These constituents, however, were not identified as COIs because their exceedences were based on elevated detection limits. Discussion of these constituents is deferred to the uncertainty discussion in Appendix F-1, SWMU-specific Uncertainties.

4.4.3.2 Site-Specific Soil Screening Levels

The potential for leaching from soil to groundwater at this SWMU Group is further evaluated using site-specific SSLs. Site-specific SSLs were derived for SWMUs 7, 8, 9, and 11 in Phase 2 using site-specific data. SSLs were calculated to further evaluate if the constituents detected within the unsaturated zone at levels exceeding the USEPA SSLs could potentially migrate to groundwater at concentrations of concern. Site-specific SSLs were calculated for each constituent whose maximum detection exceeded the USEPA SSL. The most conservative site-specific SSL for the individual SWMUs was assumed as the site-specific SSL for the entire SWMU Group. The maximum detected concentration of each constituent was then compared to the site-specific SWMU Group SSL. Site-specific SSLs for the SWMU Group are presented in Table 3.2-2.

Table 4.4-7 presents a comparison between the calculated SSLs and the maximum detected concentrations of those constituents that exceed the USEPA SSL in soils at all depths. Eight organics have maximum detected concentrations that exceed the site-specific SSLs.

4.4.3.3 Exposure Assessment

Exposure point concentrations used for SWMU Group C COIs are presented in Table 4.4-8. The EPCs for 2,4-toluenediamine were evaluated as 15.6 mg/kg in 0-2 foot soils, and as 23.9 mg/kg in 0-5 foot soils. These distributions were assumed to be lognormal as the data distributions were undefined. These concentrations were calculated using the equations in Section 3.2.3 and appropriate exposure parameters for the receptors evaluated.

4.4.3.4 Exposure Risk Assessment Results

Table 4.4-9 provides a summary of the theoretical excess lifetime cancer risks for the industrial worker and construction worker receptors. Non-cancer hazard indices were not calculated as the

COI identified is not considered to have non-carcinogenic effects. The total cancer risks for these two receptors are 1.9×10^{-5} and are 3.8×10^{-6} , which are within the acceptable range of 1×10^{-4} to 1×10^{-6} for human health risk established by the USEPA. Given that these risks are acceptable, no refined receptor evaluation was necessary, as discussed in Section 3.2.3.

4.4.4 Discussions with USEPA

SWMUs 7, 8, 9, and 11 were discussed with USEPA on April 4, 1999. During this discussion, it was concluded that these units should be grouped into SWMU Group C because SWMU 7 completely surrounds the other units and that this group would require additional investigation during Phase 3 of the RFI. USEPA agreed that resampling was not necessary for SM007-TB01, -TB04, -TB11, or SM008-TB01. However, resampling for the 0 to 1 ft-bgs interval in SM007-TB06, -TB07 and -TB08 was required. USEPA also agreed to all of the proposed soil boring locations for this SWMU Group presented in the Phase 2 report.

SWMU Group C was discussed with USEPA on August 14, 2000, after the initial submission of the Final RFI Report. A surface condition map was completed based on the discussion (Figure 4.4-2). This map shows that most of this SWMU group is either covered with gravel or asphalt and that soil is generally not exposed. USEPA indicated that they generally agree with the conclusions presented in the Final RFI; 1) no further action based on exposure risk, 2) further evaluation as a potential source area in the groundwater CMS, and 2) inclusion in the facility's institutional control plan covering subsurface work.

4.4.5 Conclusions and Recommendations

Based on the exposure risk assessment results, no further action is warranted at SWMU Group C. This conclusion is based on the calculated risks for industrial and construction worker scenarios, which are within the acceptable range defined by USEPA. Additionally, only one constituent (2,4-TDA) exceeded the USEPA Region III industrial RBCs in shallow soil (0-2 and 0-5 ft-bgs). All the samples which exceeded the industrial RBC for 2,4-TDA consisted predominantly of TDI residue, a visually distinctive material. Because constituents exceed the industrial RBCs, Bayer will include SWMU Group C in the facility's institutional control plan for worker safety while performing subsurface work.

Based on the SSL screening, there is a potential for constituents to leach to groundwater at potentially unacceptable concentrations. Bayer performs quarterly groundwater monitoring in accordance with a USEPA-approved groundwater monitoring plan. The objective of the

groundwater monitoring plan is to ensure that potentially impacted groundwater is captured by on-site recovery wells. The groundwater monitoring has been performed at the facility since 1986 and has consistently shown on-site capture of groundwater by the site's pumping wells.

Although no further action is recommended for SWMU Group C based on the exposure assessment, the potential for constituents to leach to groundwater is a potential concern. Therefore, SWMU Group C will be evaluated as a potential source area for constituents identified in groundwater and further action, if necessary, at this SWMU will be evaluated as part of a CMS for groundwater.

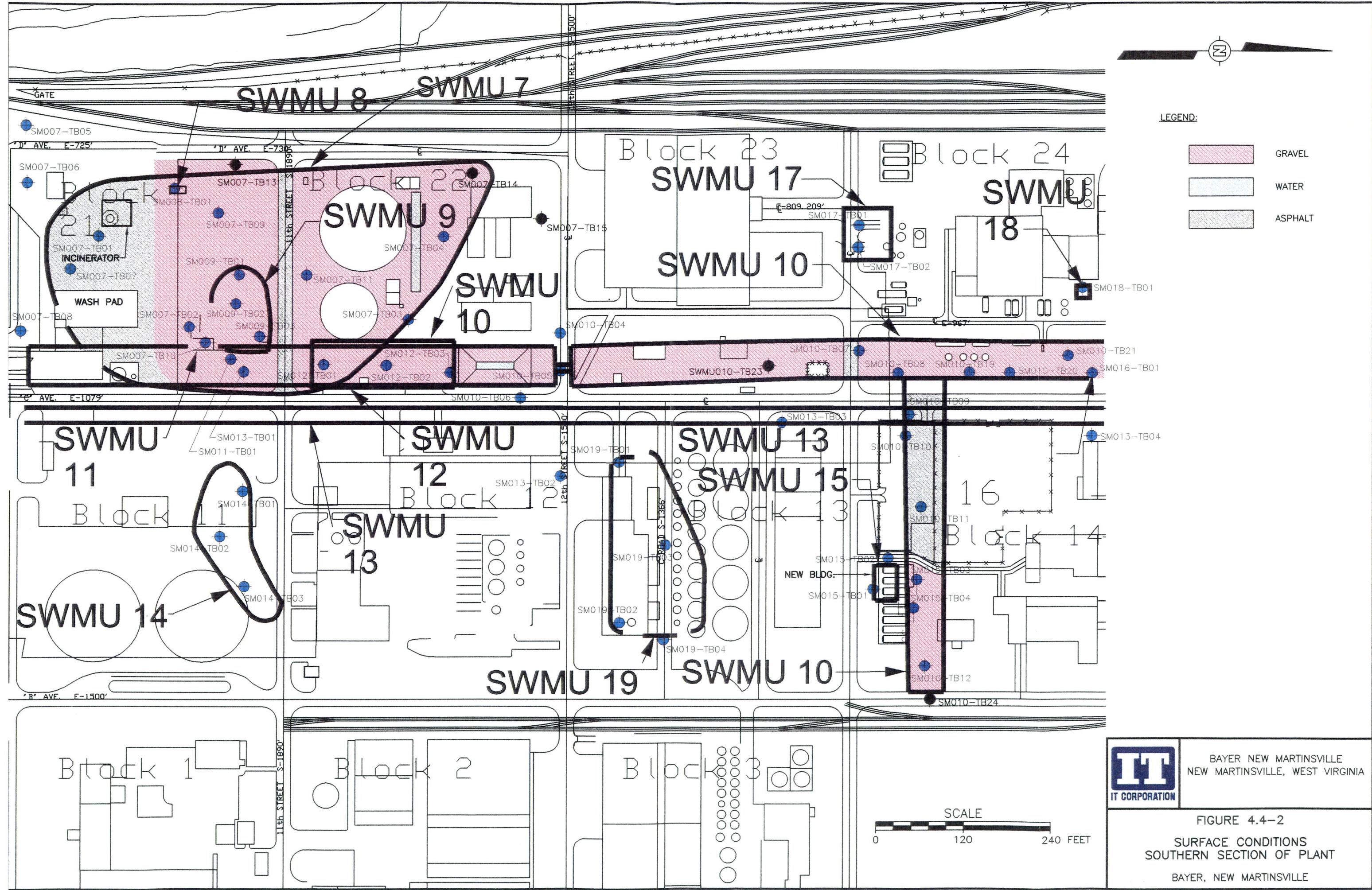


TABLE 4.4-1
Statistical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB01-0001	SM007-TB01-0305	SM007-TB01-1517	SM007-TB02-0001	SM007-TB02-0305	SM007-TB02-1113	SM007-TB02-1416	SM007-TB02-1719	SM007-TB03-0001
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	15.00-17.00	0.00-1.00	3.00-5.00	11.00-13.00	14.00-16.00	17.00-19.00	0.00-1.00
SAMPLE LOCATION	TB01	TB01	TB01	TB02	TB02	TB02	TB02	TB02	TB03
PARAMETER									
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	<269	<296	<295	<278	<266	<296	<286	<291	<270
1,1,1-Trichloroethane	<140	<154	<153	<144	<138	<154	<149	<151	<141
1,1,2,2-Tetrachloroethane	<140	<154	<153	<144	<138	<154	<149	<151	<141
1,1,2-Trichloroethane	<269	<296	<295	<278	<266	<296	<286	<291	<270
1,1-Dichloroethane	<140	<154	<153	<144	<138	<154	<149	<151	<141
1,1-Dichloroethene	<269	<296	<295	<278	<266	<296	<286	<291	<270
1,1-Dichloropropene	<140	<154	<153	<144	<138	<154	<149	<151	<141
1,2,3-Trichlorobenzene	<140	<154	<153	<144	<138	<154	<149	<151	<141
1,2,3-Trichloropropane	<140	<154	<153	<144	<138	<154	<149	<151	<141
1,2,4-Trichlorobenzene	785	154 J	<153	<144	<138	<154	<149	<151	<141
1,2,4-Trimethylbenzene	<140	<154	<153	<144	<138	<154	<149	<151	<141
1,2-Dibromo-3-chloropropane	<269	<296	<295	<278	<266	<296	<286	<291	<270
1,2-Dibromoethane	<140	<154	<153	<144	<138	<154	<149	<151	<141
1,2-Dichlorobenzene	2150	<296	<295	1220	106000	4140	4010	5470	314 J
1,2-Dichloroethane	<269	<296	<295	<278	<266	<296	<286	<291	<270
1,2-Dichloropropane	<409	<450	<449	<422	<404	<450	<435	<442	<411
1,3,5-Trimethylbenzene	<140	<154	<153	<144	<138	<154	<149	<151	<141
1,3-Dichlorobenzene	<269	<296	<295	<278	627 J	<296	<286	<291	<270
1,3-Dichloropropane	<140	<154	<153	<144	<138	<154	<149	<151	<141
1,4-Dichlorobenzene	<269	<296	<295	<278	19100	379 J	470 J	605 J	<270
2,2-Dichloropropane	<140	<154	<153	<144	<138	<154	<149	<151	<141
2-Butanone	<947	<1040	<1040	<977	<935	<1040	<1010	<1020	<952
2-Chloroethyl Vinyl Ether	<269	<296	<295	<278	<266	<296	<286	<291	<270
2-Chlorotoluene	<140	<154	<153	<144	<138	<154	<149	<151	<141
2-Hexanone	<409	<450	<449	<422	<404	<450	<435	<442	<411
4-Chlorotoluene	<140	<154	<153	<144	<138	<154	<149	<151	<141
4-Methyl-2-pentanone	<409	<450	<449	<422	<404	<450	<435	<442	<411
Acetone	<947	<1040	<1040	<977	<935	<1040	<1010	<1020	<952
Acrolein	<2690	<2960	<2950	<2780	<2660	<2960	<2860	<2910	<2700
Acrylonitrile	<1400	<1540	<1530	<1440	<1380	<1540	<1490	<1510	<1410
Allyl Chloride	<140	<154	<153	<144	<138	<154	<149	<151	<141
Benzene	<140 J	<154 J	<153 J	<144	138 J	<154	1370	465 J	<141
Bromobenzene	<140	<154	<153	<144	<138	<154	<149	<151	<141
Bromochloromethane	<140	<154	<153	<144	<138	<154	<149	<151	<141
Bromodichloromethane	<269	<296	<295	<278	<266	<296	<286	<291	<270
Bromoform	<140	<154	<153	<144	<138	<154	<149	<151	<141
Bromomethane	<409	<450	<449	<422	<404	<450	<435	<442	<411
Carbon Disulfide	<409	<450	<449	<422	<404	<450	<435	<442	<411
Carbon Tetrachloride	<140	<154	<153	<144	<138	<154	<149	<151	<141
Chlorobenzene	1940	331 J	248 J	1020	21300	2720	6640	4070	379 J
Chloroethane	<409	<450	<449	<422	<404	<450	<435	<442	<411
Chloroform	<140	<154	<153	<144	<138	<154	<149	<151	<141
Chloromethane	<269	<296	<295	<278	<266	<296	<286	<291	<270
Dibromochloromethane	<140	<154	<153	<144	<138	<154	<149	<151	<141
Dibromomethane	<140	<154	<153	<144	<138	<154	<149	<151	<141
Dichlorodifluoromethane	<269	<296	<295	<278	<266	<296	<286	<291	<270
Ethyl Methacrylate	<140	<154	<153	<144	<138	<154	<149	<151	<141
Ethylbenzene	<140	<154	<153	<144	<138	<154	<149	<151	<141
Freon 113	<269	817 JB	<295	<278	<266	3310	<286	<291	790 J
Freon 141b	<140	<154	<153	<144	<138	<154	<149	<151	<141
Hexachlorobutadiene	<269	<296	<295	<278	<266	<296	<286	<291	<270
Isopropylbenzene	<409	<450	<449	<422	<404	<450	<435	<442	<411
Methyl Iodide	<409	<450	<449	<422	<404	<450	<435	<442	<411
Methylene Chloride	<269	<296	<295	<278	<266	<296	<286	<291	<270

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB01-0001	SM007-TB01-0305	SM007-TB01-1517	SM007-TB02-0001	SM007-TB02-0305	SM007-TB02-1113	SM007-TB02-1416	SM007-TB02-1719	SM007-TB03-0001
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	15.00-17.00	0.00-1.00	3.00-5.00	11.00-13.00	14.00-16.00	17.00-19.00	0.00-1.00
SAMPLE LOCATION	TB01	TB01	TB01	TB02	TB02	TB02	TB02	TB02	TB03
PARAMETER									
Naphthalene	< 140	< 154	< 153	< 144	< 138	< 154	< 149	< 151	< 141
Styrene	< 140	< 154	< 153	< 144	< 138	< 154	< 149	< 151	< 141
Tetrachloroethene	< 140	< 154	< 153	< 144	574 J	< 154	< 149	< 151	< 141
Toluene	140 J	< 154 J	< 153 J	< 144	202 J	< 154	2060	267 J	< 141
Trichloroethene	< 140	< 154	< 153	< 144	< 138	< 154	218 J	< 151	< 141
Trichlorofluoromethane	< 269	< 296	< 295	< 278	< 266	< 296	< 286	< 291	< 270
Vinyl Acetate	< 409	< 450	< 449	< 422	< 404	< 450	< 435	< 442	< 411
Vinyl Chloride	< 269	< 296	< 295	< 278	< 266	< 296	< 286	< 291	< 270
cis-1,2-Dichloroethene	< 269	< 296	< 295	< 278	< 266	< 296	< 286	< 291	< 270
cis-1,3-Dichloropropene	< 140	< 154	< 153	< 144	< 138	< 154	< 149	< 151	< 141
m+p-Xylene	< 140	< 154	< 153	< 144	< 138	< 154	< 149	< 151	< 141
n-Butylbenzene	< 140	< 154	< 153	< 144	< 138	< 154	< 149	< 151	< 141
n-Propylbenzene	< 140	< 154	< 153	< 144	< 138	< 154	< 149	< 151	< 141
o-Xylene	< 140	< 154	< 153	< 144	< 138	< 154	< 149	< 151	< 141
p-Isopropyltoluene	< 140	< 154	< 153	< 144	266 J	< 154	286 J	267 J	< 141
sec-Butylbenzene	< 140	< 154	< 153	< 144	< 138	< 154	< 149	< 151	< 141
tert-Butylbenzene	< 140	< 154	< 153	< 144	< 138	< 154	< 149	< 151	< 141
trans-1,2-Dichloroethene	< 269	< 296	< 295	< 278	< 266	< 296	< 286	< 291	< 270
trans-1,3-Dichloropropene	< 140	< 154	< 153	< 144	< 138	< 154	< 149	< 151	< 141
trans-1,4-Dichloro-2-butene	< 1400	< 1540	< 1530	< 1440	< 1380	< 1540	< 1490	< 1510	< 1410
Semivolatiles (µg/kg)									
1,2,3-Trichlorobenzene	< 2580	R	R	< 2660	< 12800	< 11400	< 137000	< 5580	< 2600
1,2,4,5-Tetrachlorobenzene	< 2580	R	R	< 2660	< 12800	< 11400	< 137000	< 5580	< 2600
1,2,4-Trichlorobenzene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
1,2-Dichlorobenzene	10300	R	R	15200	279000	< 9470	< 115000	15500	< 2160
1,3-Dichlorobenzene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
1,4-Dichlorobenzene	< 2150	R	R	< 2220	36800	< 9470	< 115000	< 4650	< 2160
1-Chloronaphthalene	< 5380	R	R	< 5550	< 26600	< 23700	< 286000	< 11600	< 5410
1-Methylnaphthalene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
1-Naphthylamine	< 7320	R	R	< 7550	< 36100	< 32200	< 389000	< 15800	< 7360
2,3,4,6-Tetrachlorophenol	< 4300	R	R	< 4440	< 21300	< 18900	< 229000	< 9300	< 4330
2,3-Dichloroaniline	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
2,4,5-Trichlorophenol	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
2,4,6-Trichlorophenol	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
2,4-Dichlorophenol	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
2,4-Dimethylphenol	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
2,4-Dinitrophenol	< 13300	R	R	< 13800	< 65900	< 58700	< 710000	< 28800	< 13400
2,4-Dinitrotoluene	7340	R	R	< 2220	< 10600	493000	6230000	712000	< 2160
2,4-Toluenediamine	< 10800	R	R	< 11100	< 53200	< 47300	< 573000	< 23300	< 10800
2,6-Dichlorophenol	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
2,6-Dinitrotoluene	< 2150	R	R	< 2220	< 10600	237000	3570000	397000	< 2160
2-Chloronaphthalene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
2-Methylnaphthalene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
2-Naphthylamine	< 8180	R	R	< 8440	< 40400	< 36000	< 435000	< 17700	< 8220
2-Nitroaniline	< 2580	R	R	< 2660	< 12800	< 11400	< 137000	< 5580	< 2600
2-Nitrodiphenylamine	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
2-Nitrophenol	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
2-Picoline	< 7960	R	R	< 8220	< 39300	< 35000	< 424000	< 17200	< 8010
3,3'-Dichlorobenzidine	< 13100	R	R	< 13500	< 64900	< 57800	< 699000	< 28400	< 13200
3-Methylcholanthrene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
3-Nitroaniline	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
4,4' Methyleneedianiline	< 18900	R	R	< 19500	< 93600	< 83300	< 1010000	< 40900	< 19000
4,6-Dinitro-o-cresol	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160

LE 4.4-1
Sediment Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB01-0001	SM007-TB01-0305	SM007-TB01-1517	SM007-TB02-0001	SM007-TB02-0305	SM007-TB02-1113	SM007-TB02-1416	SM007-TB02-1719	SM007-TB03-0001
SAMPLE DEPTH(0)	0.00-1.00	3.00-5.00	15.00-17.00	0.00-1.00	3.00-5.00	11.00-13.00	14.00-16.00	17.00-19.00	0.00-1.00
SAMPLE LOCATION	TB01	TB01	TB01	TB02	TB02	TB02	TB02	TB02	TB03
SAMPLE DATE	6/23/1997	6/23/1997	6/23/1997	6/24/1997	6/24/1997	6/24/1997	6/24/1997	7/17/1997	6/25/1997
PARAMETER									
4-Aminobiphenyl	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
4-Aminodiphenylamine	< 5380	R	R	< 5550	< 26600	< 23700	< 286000	< 11600	< 5410
4-Bromophenyl phenyl ether	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
4-Chloro-m-cresol	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
4-Chlorophenylphenyl ether	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
4-Nitroaniline	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
4-Nitrophenol	< 2150 J	R	R	< 2220 J	< 10600 J	< 9470 J	< 115000 J	< 4650 J	< 2160 J
5-Nitro-o-toluidine	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
7,12-dimethylbenz[a]anthracene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Acenaphthene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Acenaphthylene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Acetophenone	< 2800	R	R	< 2890	< 13800	< 12300	< 149000	< 6050	< 2810
Aniline	< 3010	R	R	24000	< 14900	< 13300	< 160000	< 6510	< 3030
Anthracene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Azobenzene	< 2580	R	R	< 2660	< 12800	< 11400	< 137000	< 5580	< 2600
Benzidine	< 34400	R	R	< 35500	< 170000	< 151000	< 183000	< 74400	< 34600
Benzo(a)anthracene	< 2800	R	R	< 2890	< 13800	< 12300	< 149000	< 6050	< 2810
Benzo(a)pyrene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Benzo(b)fluoranthene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Benzo(ghi)perylene	< 2370	R	R	< 2440	< 11700	< 10400	< 126000	< 5120	< 2380
Benzo(k)fluoranthene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Benzoic Acid	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Benzyl Alcohol	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Benzyl butyl phthalate	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Bis(2-chloroethoxy)ethane	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Bis(2-chloroethyl)ether	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Bis(2-chloroisopropyl)ether	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Bis(2-ethylhexyl) phthalate	< 2580	R	R	< 2660	< 12800	< 11400	< 137000	< 5580	< 2600
Bisphenol A	54700	4690 J	R	8500 B	< 19100	< 17000	< 206000	< 8370	< 3890
Carbazole	< 10800	R	R	< 11100	< 53200	< 47300	< 573000	< 23300	< 10800
Chrysene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Cyclohexanone	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Di-n-butyl phthalate	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Di-n-octyl phthalate	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Dibenzo(a,h)anthracene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Dibenzofuran	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Diethyl Phthalate	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Dimethylphthalate	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Ethyl Methane Sulfonate	< 3870	R	R	< 4000	< 19100	< 17000	< 206000	< 8370	< 3890
Fluoranthene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Fluorene	< 2150 J	R	R	< 2220 J	< 10600 J	< 9470 J	< 115000 J	< 4650 J	< 2160 J
Heptachlor	< 2370	R	R	< 2440	< 11700	< 10400	< 126000	< 5120	< 2380
Hexachlorobenzene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Hexachlorobutadiene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Hexachlorocyclopentadiene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Hexachloroethane	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Indeno(1,2,3-cd)pyrene	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Isophorone	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
Methyl methane sulfonate	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
N-Nitrosodibutylamine	< 2150	R	R	< 2220	< 10600	< 9470	< 115000	< 4650	< 2160
N-Nitrosodimethylamine	< 2150 J	R	R	< 2220 J	< 10600 J	< 9470 J	< 115000 J	< 4650 J	< 2160 J

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB01-0001	SM007-TB01-0305	SM007-TB01-1517	SM007-TB02-0001	SM007-TB02-0305	SM007-TB02-1113	SM007-TB02-1416	SM007-TB02-1719	SM007-TB03-0001
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	15.00-17.00	0.00-1.00	3.00-5.00	11.00-13.00	14.00-16.00	17.00-19.00	0.00-1.00
SAMPLE LOCATION	TB01	TB01	TB01	TB02	TB02	TB02	TB02	TB02	TB03
SAMPLE DATE	6/23/1997	6/23/1997	6/23/1997	6/24/1997	6/24/1997	6/24/1997	6/24/1997	7/17/1997	6/25/1997
PARAMETER									
N-Nitrosodiphenylamine	<2800	R	R	<2890	<13800	<12300	<149000	<6050	<2810
N-Nitrosodipropylamine	<2150	R	R	<2220	<10600	<9470	<115000	<4650	<2160
N-Nitrosopiperidine	<2150	R	R	<2220	<10600	<9470	<115000	<4650	<2160
Naphthalene	2930	R	R	<2220	<10600	<9470	<115000	<4650	<2160
Nitrobenzene	<2150	R	R	<2220	<10600	<9470	<115000	<4650	<2160
Pentachlorobenzene	<3660	R	R	<3770	<18100	<16100	<195000	<7910	<3680
Pentachloronitrobenzene	<2150	R	R	<2220	<10600	<9470	<115000	<4650	<2160
Pentachlorophenol	<2150	R	R	<2220	<10600	<9470	<115000	<4650	<2160
Phenacetin	<2150	R	R	<2220	<10600	<9470	<115000	<4650	<2160
Phenanthrene	<2150	R	R	<2220	<10600	<9470	<115000	<4650	<2160
Phenol	2970	R	R	<1330	<6380	<5680	<68700	<2790	<1300
Pyrene	<2150	R	R	<2220	<10600	<9470	<115000	<4650	<2160
Pyridine	<2370	R	R	<2440	<11700	<10400	<126000	<5120	<2380
Trimethylphosphate	<2150	R	R	<2220	<10600	<9470	<115000	<4650	<2160
Triphenylphosphate	<10800	R	R	<11100	<53200	<47300	<573000	<23300	<10800
m,p-Cresol	<3230	R	R	<3330	<16000	<14200	<172000	<6980	<3250
m-Nitrotoluene	<2150	R	R	<2220	<10600	10100	260000	22600	<2160
m-Toluidine	<4300	R	R	<4440	<21300	<18900	<229000	<9300	<4330
o,p-Toluidine	<11000	R	R	<11300	<54200	<48300	<584000	<23700	<11000
o-Cresol	<2150	R	R	<2220	<10600	<9470	<115000	<4650	<2160
o-Nitrotoluene	<2150	R	R	<2220	<10600	130000	3400000	216000	<2160
p-Chloroaniline	<2150	R	R	4840	<10600	<9470	<115000	<4650	<2160
p-Dimethylaminoazobenzene	<2150	R	R	<2220	<10600	<9470	<115000	<4650	<2160
p-Nitrotoluene	<3230	R	R	<3330	<16000	24100	1940000	108000	<3250
Metals (µg/kg)									
Antimony	<430 J	<473 J	<472 J	<444 J	<425 J	<473 J	<458 J	<465 J	<433 J
Cadmium	2141	658	<470	1583	689	785	710	<470	1398
Chromium	10330	8651	8819	13389	8432	9667	6976	10807	37840
Lead	15379	19887	11760	18854	17437	14355	11902	11854	21698
Nickel	273620	70686J	9453J	89593J	43219J	11550J	10368J	14923J	11014J
Miscellaneous (µg/kg)									
Percent Moisture	7.05%	15.5%	15.28%	9.93%	5.93%	15.5%	12.7%	14.0%	7.56%
Total Organic Carbon	16600000 J	NA							
BTU from ECD	NA								
Ignitability (Flash Point) for S	NA								
Percent Ash	NA								
<=Nondetect at reported limit									

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data. Additional information provided in Appendix G

U=Nondetect at reported limit

<=Nondetect at reported limit

ILE 4.4-1
Sediment Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB03-0305	SM007-TB03-0305FD	SM007-TB03-1315	SM007-TB04-0001	SM007-TB04-0305	SM007-TB04-0507	SM007-TB04-0709	SM007-TB05-0001	SM007-TB05-0305
SAMPLE DEPTH(ft)	3.00-5.00 TB03 6/25/1997	3.00-5.00 TB03 6/25/1997	13.00-15.00 TB03 6/25/1997	0.00-1.00 TB04 6/25/1997	3.00-5.00 TB04 6/25/1997	5.00-7.00 TB04 7/15/1997	7.00-9.00 TB04 6/25/1997	0.00-1.00 TB05 6/20/1997	3.00-5.00 TB05 6/20/1997
SAMPLE LOCATION									
PARAMETER									
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	<286	<286	<295	<276	<295	<279	<3210	<263	<296
1,1,1-Trichloroethane	<149	<149	<153	<143	<153	<145	<1670	<137	<154
1,1,2,2-Tetrachloroethane	<149	<149	<153	<143	<153	<145	<1670	<137	<154
1,1,2-Trichloroethane	<286	<286	<295	<276	<295	<279	<3210	<263	<296
1,1-Dichloroethane	<149	<149	<153	<143	<153	<145	<1670	<137	<154
1,1-Dichloroethene	<286	<286	<295	<276	<295	<279	<3210	<263	<296
1,1-Dichloropropene	<149	<149	<153	<143	<153	<145	<1670	<137	<154
1,2,3-Trichlorobenzene	<149	<149	<153	<143	<153	<145	<1670	<137	<154
1,2,3-Trichloropropane	<149	<149	<153	<143	<153	<145	<1670	<137	<154
1,2,4-Trichlorobenzene	<149	<149	354 J	<143	<153	<145	<1670	<137	<154
1,2,4-Trimethylbenzene	<149	2400	<153	<143	2830	4910 K	1790 J	1160	<154
1,2-Dibromo-3-chloropropane	<286	<286	<295	<276	<295	<279	<3210	<263	<296
1,2-Dibromoethane	<149	<149	<153	<143	<153	<145	<1670	<137	<154
1,2-Dichlorobenzene	<286	<286	57800	<276	<295	2340 K	6030 J	11600	993
1,2-Dichloroethane	<286	<286	<295	<276	<295	<279	<3210	<263	<296
1,2-Dichloropropane	<435	<435	<448	<419	<448	<424	<4870	<400	<449
1,3,5-Trimethylbenzene	<149	709 J	<153	<143	837	1780 K	<1670	516 J	<154
1,3-Dichlorobenzene	<286	<286	507 J	<276	<295	<279	<3210	<263	<296
1,3-Dichloropropane	<149	<149	<153	<143	<153	<145	<1670	<137	<154
1,4-Dichlorobenzene	<286	<286	7080	<276	<295	<279	<3210	1470	<296
2,2-Dichloropropane	<149	<149	<153	<143	<153	<145	<1670	<137	<154
2-Butanone	<1010	<1010	<1040	<971	<1040	<981	<11300	<927	<1040
2-Chloroethyl Vinyl Ether	<286	<286	<295	<276	<295	<279	<3210	<263	<296
2-Chlorotoluene	<149	<149	<153	<143	<153	<145	<1670	<137	<154
2-Hexanone	<435	<435	<448	<419	<448	<424	<4870	<400	<449
4-Chlorotoluene	<149	<149	<153	<143	<153	<145	<1670	<137	<154
4-Methyl-2-pentanone	<435	<435	<448	<419	<448	<424	<4870	<400	<449
Acetone	<1010	<1010	<1040	<971	<1040	<981	<11300	<927	<1040
Acrolein	<2860	<2860	<2950	<2760	<2950	<2790	<32100	<2630	<2960
Acrylonitrile	<1490	<1490	<1530	<1430	<1530	<1450	<16700	<1370	<1540
Allyl Chloride	<149	<149	<153	<143	<153	<145	<1670	<137	<154
Benzene	<149	<149	<153	<143	<153	156 J	<1670	<137	<154
Bromobenzene	<149	<149	<153	<143	<153	<145	<1670	<137	<154
Bromochloromethane	<149	<149	<153	<143	<153	<145	<1670	<137	<154
Bromodichloromethane	<286	<286	<295	<276	<295	<279	<3210	<263	<296
Bromoform	<149	<149	<153	<143	<153	<145	<1670	<137	<154
Bromomethane	<435	<435	<448	<419	<448	<424	<4870	<400	<449
Carbon Disulfide	<435	<435	<448	<419	<448	<424	<4870	<400	<449
Carbon Tetrachloride	<149	<149	<153	<143	<153	<145	<1670	<137	<154
Chlorobenzene	275 J	6980	29500	210 J	8140	234000 K	.949000	16900	449 J
Chloroethane	<435	<435	<448	<419	<448	<424	<4870	<400	<449
Chloroform	<149	<149	<153	<143	<153	<145	<1670	<137	<154
Chloromethane	<286	<286	<295	<276	<295	<279	<3210	<263	<296
Dibromochloromethane	<149	<149	<153	<143	<153	<145	<1670	<137	<154
Dibromomethane	<149	<149	<153	<143	<153	<145	<1670	<137	<154
Dichlorodifluoromethane	<286	<286	<295	<276	<295	<279	<3210	<263	<296
Ethyl Methacrylate	<149	<149	<153	<143	<153	<145	<1670	<137	<154
Ethylbenzene	<149	<149	<153	<143	<153	1340 K	<1670	147 J	<154
Freon 113	<286	<286	307 J	<276	<295	334 J	<3210	685 JB	508 JB
Freon 141b	<149	<149	<153	<143	<153	<145	<1670	<137	<154
Hexachlorobutadiene	<286	<286	<295	<276	<295	<279	<3210	<263	<296
Isopropylbenzene	<435	<435	<448	<419	<448	<424	<4870	<400	<449
Methyl Iodide	<435	<435	<448	<419	<448	<424	<4870	<400	<449
Methylene Chloride	<286	<286	<295	<276	<295	<279	<3210	<263	<296

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C; SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB03-0305	SM007-TB03-0305FD	SM007-TB03-1315	SM007-TB04-0001	SM007-TB04-0305	SM007-TB04-0507	SM007-TB04-0709	SM007-TB05-0001	SM007-TB05-0305
SAMPLE DEPTH(ft)	3.00-5.00	3.00-5.00	13.00-15.00	0.00-1.00	3.00-5.00	5.00-7.00	7.00-9.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB03	TB03	TB03	TB04	TB04	TB04	TB04	TB05	TB05
PARAMETER									
Naphthalene	< 149	1260	366 J	< 143	1300	446 J	< 1670	< 137	< 154
Styrene	< 149	< 149	< 153	< 143	< 153	< 145	< 1670	< 137	< 154
Tetrachloroethene	< 149	< 149	< 153	< 143	< 153	< 145	< 1670	< 137	< 154
Toluene	< 149	< 149	< 153	< 143	< 153	713 K	3720 J	< 137	< 154
Trichloroethene	< 149	< 149	< 153	< 143	< 153	< 145	< 1670	< 137	733 J
Trichlorofluoromethane	< 286	< 286	< 295	< 276	< 295	< 279	< 3210	< 263	< 296
Vinyl Acetate	< 435	< 435	< 448	< 419	< 448	< 424	< 4870	< 400	< 449
Vinyl Chloride	< 286	< 286	< 295	< 276	< 295	< 279	< 3210	< 263	< 296
cis-1,2-Dichloroethene	< 286	< 286	< 295	< 276	< 295	< 279	< 3210	< 263	319 J
cis-1,3-Dichloropropene	< 149	< 149	< 153	< 143	< 153	< 145	< 1670	< 137	< 154
m+p-Xylene	< 149	355 J	< 153	< 143	389 J	4570 K	4230 J	632 J	< 154
n-Butylbenzene	< 149	< 149	< 153	< 143	< 153	424 J	< 1670	< 137	< 154
n-Propylbenzene	< 149	183 J	< 153	< 143	224 J	680 J	< 1670	< 137	< 154
o-Xylene	< 149	< 149	< 153	< 143	< 153	156 J	< 1670	421 J	< 154
p-Isopropyltoluene	< 149	< 149	1300	< 143	< 153	1230 K	3720 J	158 J	< 154
sec-Butylbenzene	< 149	< 149	< 153	< 143	< 153	< 145	< 1670	< 137	< 154
tert-Butylbenzene	< 149	< 149	< 153	< 143	< 153	< 145	< 1670	< 137	< 154
trans-1,2-Dichloroethene	< 286	< 286	< 295	< 276	< 295	< 279	< 3210	< 263	< 296
trans-1,3-Dichloropropene	< 149	< 149	< 153	< 143	< 153	< 145	< 1670	< 137	< 154
trans-1,4-Dichloro-2-butene	< 1490	< 1490	< 1530	< 1430	< 1530	< 1450	< 16700	< 1370	< 1540
Semivolatiles (µg/kg)									
1,2,3-Trichlorobenzene	< 2750	< 2750	< 14200	< 2650	R	< 270	< 72400	< 2530	< 2840
1,2,4,5-Tetrachlorobenzene	< 2750	< 2750	< 14200	< 2650	R	< 270	< 72400	< 2530	< 2840
1,2,4-Trichlorobenzene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
1,2-Dichlorobenzene	< 2290	< 2290	100000	< 2210	R	1090	< 60300	22100	< 2360
1,3-Dichlorobenzene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
1,4-Dichlorobenzene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
1-Chloronaphthalene	< 5720	< 5720	< 29500	< 5520	R	< 560	< 151000	< 5270	< 5910
1-Methylnaphthalene	< 2290 J	2430 J	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
1-Naphthylamine	< 7780	< 7780	< 40100	< 7500	R	< 760	< 205000	< 7160	< 8040
2,3,4,6-Tetrachlorophenol	< 4580	< 4580	< 23600	< 4410	R	< 450	< 121000	< 4210	< 4730
2,3-Dichloroaniline	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
2,4,5-Trichlorophenol	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
2,4,6-Trichlorophenol	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
2,4-Dichlorophenol	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
2,4-Dimethylphenol	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
2,4-Dinitrophenol	< 14200	< 14200	< 73100	< 13700	R	< 1380	< 374000	< 13100	< 14700
2,4-Dinitrotoluene	< 2290	< 2290	170000	< 2210	R	< 220	< 60300	< 2110	< 2360
2,4-Toluenediamine	< 11400	< 11400	< 59000	< 11000	R	39700	12300000	< 10500	< 11800
2,6-Dichlorophenol	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
2,6-Dinitrotoluene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
2-Chloronaphthalene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
2-Chlorophenol	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
2-Methylnaphthalene	< 2290 J	4870 J	< 11800	< 2210	4220 J	450	< 60300	< 2110	< 2360
2-Naphthylamine	< 8700	< 8700	< 44800	< 8390	R	< 850	< 229000	< 8010	< 8980
2-Nitroaniline	< 2750	< 2750	< 14200	< 2650	R	< 270	< 72400	< 2530	< 2840
2-Nitrodiphenylamine	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
2-Nitrophenol	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
2-Picoline	< 8470	< 8470	< 43600	< 8170	R	< 820	< 223000	< 7800	< 8750
3,3'-Dichlorobenzidine	< 14000	< 14000	< 71900	< 13500	R	< 1360	< 368000	< 12900	< 14400
3-Methylcholanthrene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
3-Nitroaniline	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
4,4' Methyleneedianiline	< 20100	< 20100	< 104000	< 19400	R	< 1960	< 531000	< 18500	< 20800
4,6-Dinitro-o-cresol	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360

Table 4.4-1
Statistical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

PARAMETER	SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM007-TB03-0305 3.00-5.00 TB03 6/25/1997	SM007-TB03-0305FD 3.00-5.00 TB03 6/25/1997	SM007-TB03-1315 13.00-15.00 TB03 6/25/1997	SM007-TB04-0001 0.00-1.00 TB04 6/25/1997	SM007-TB04-0305 3.00-5.00 TB04 6/25/1997	SM007-TB04-0507 5.00-7.00 TB04 7/15/1997	SM007-TB04-0709 7.00-9.00 TB04 6/25/1997	SM007-TB05-0001 0.00-1.00 TB05 6/20/1997	SM007-TB05-0305 3.00-5.00 TB05 6/20/1997
4-Aminobiphenyl	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
4-Aminodiphenylamine	< 5720	< 5720	< 29500	< 5520	R	< 560	< 151000	< 5270	< 5910	
4-Bromophenyl phenyl ether	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
4-Chloro-m-cresol	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
4-Chlorophenylphenyl ether	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
4-Nitroaniline	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
4-Nitrophenol	< 2290 J	< 2290 J	< 11800 J	< 2210 J	R	< 220 J	< 60300 J	< 2110 J	< 2360 J	
5-Nitro-o-toluidine	< 2290	< 2290	38800	< 2210	R	< 220	< 60300	< 2110	< 2360	
7,12-dimethylbenz[a]anthracene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Acenaphthene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Acenaphthylene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Acetophenone	< 2970	< 2970	< 15300	< 2870	R	< 290	< 78400	< 2740	< 3070	
Aniline	< 3200	< 3200	< 16500	< 3090	R	760	< 84400	6340	< 3310	
Anthracene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Azobenzene	< 2750	< 2750	< 14200	< 2650	R	< 270	< 72400	< 2530	< 2840	
Benzidine	< 36600	< 36600	< 189000	< 35300	R	< 3570	< 965000	< 33700	< 37800	
Benzo(a)anthracene	< 2970	< 2970	26400	< 2870	R	< 290	< 78400	< 2740	< 3070	
Benzo(a)pyrene	< 2290	< 2290	14900	< 2210	R	< 220	< 60300	< 2110	< 2360	
Benzo(b)fluoranthene	< 2290	< 2290	15200	< 2210	R	< 220	< 60300	< 2110	< 2360	
Benzo(ghi)perylene	< 2520	< 2520	< 13000	< 2430	R	< 250	< 66300	< 2320	< 2600	
Benzo(k)fluoranthene	< 2290	< 2290	25000	< 2210	R	< 220	< 60300	< 2110	< 2360	
Benzoic Acid	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Benzyl Alcohol	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Benzyl butyl phthalate	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Bis(2-chloroethoxymethane)	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Bis(2-chloroethyl)ether	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Bis(2-chloroisopropyl)ether	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Bis(2-ethylhexyl) phthalate	< 2750	< 2750	< 14200	< 2650	R	440 B	< 72400	< 2530	< 2840	
Bisphenol A	< 4120 J	43300 JB	65900	39100 B	R	8990	< 109000	1620000	48500	
Carbazole	< 11400	< 11400	< 59000	< 11000	R	< 301000	< 10500	< 11800		
Chrysene	< 2290	< 2290	26400	< 2210	R	< 220	< 60300	< 2110	< 2360	
Cyclohexanone	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Di-n-butyl phthalate	< 2290	< 2290	< 11800	< 2210	R	2170 B	< 60300	3330 B	13000 B	
Di-n-octyl phthalate	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Dibenzo(a,h)anthracene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Dibenzofuran	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Diethyl Phthalate	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Dimethylphthalate	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Ethyl Methane Sulfonate	< 4120	< 4120	< 21200	< 3970	R	< 400	< 109000	< 3790	< 4260	
Fluoranthene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Fluorene	< 2290 J	< 2290 J	< 11800 J	< 2210 J	R	< 220 J	< 60300 J	< 2110 J	< 2360 J	
Heptachlor	< 2520	< 2520	< 13000	< 2430	R	R	< 66300	< 2320	< 2600	
Hexachlorobenzene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Hexachlorobutadiene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Hexachlorocyclopentadiene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Hexachloroethane	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Indeno(1,2,3-cd)pyrene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Isophorone	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
Methyl methane sulfonate	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360	
N-Nitrosodibutylamine	< 2290	< 2290 J	< 2290 J	< 11800 J	< 2210 J	R	< 220	< 60300 J	< 2110	< 2360
N-Nitrosodimethylamine	< 2290 J	< 2290 J	< 2290 J	< 11800 J	< 2210 J	R	< 220 J	< 60300 J	< 2110 J	< 2360 J

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB03-0305	SM007-TB03-0305FD	SM007-TB03-1315	SM007-TB04-0001	SM007-TB04-0305	SM007-TB04-0507	SM007-TB04-0709	SM007-TB05-0001	SM007-TB05-0305
SAMPLE DEPTH(ft)	3.00-5.00	3.00-5.00	13.00-15.00	0.00-1.00	3.00-5.00	5.00-7.00	7.00-9.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB03	TB03	TB03	TB04	TB04	TB04	TB04	TB05	TB05
SAMPLE DATE	6/25/1997	6/25/1997	6/25/1997	6/25/1997	6/25/1997	7/15/1997	6/25/1997	6/20/1997	6/20/1997
PARAMETER									
N-Nitrosodiphenylamine	< 2970	< 2970	< 15300	< 2870	R	< 290	< 78400	< 2740	< 3070
N-Nitrosodipropylamine	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
N-Nitrosopiperidine	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
Naphthalene	< 2290 J	3820 J	< 11800	< 2210	3280 J	430	< 60300	< 2110	< 2360
Nitrobenzene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
Pentachlorobenzene	< 3890	< 3890	< 20100	< 3750	R	< 380	< 103000	< 3580	< 4020
Pentachloronitrobenzene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
Pentachlorophenol	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
Phenacetin	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
Phenanthrene	< 2290	< 2290	31700	< 2210	R	< 220	< 60300	< 2110	< 2360
Phenol	< 1370	< 1370	9620	< 1320	R	< 130	< 36200	12100	< 1420
Pyrene	< 2290	< 2290	35500	< 2210	R	< 220	< 60300	< 2110	< 2360
Pyridine	< 2520	< 2520	< 13000	< 2430	R	< 250	< 66300	< 2320	< 2600
Trimethylphosphate	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
Triphenylphosphate	< 11400	< 11400	< 59000	< 11000	R	< 1110	< 301000	< 10500	< 11800
m,p-Cresol	< 3430	< 3430	< 17700	< 3310	R	< 330	< 90400	< 3160	< 3550
m-Nitrotoluene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
m-Toluidine	< 4580	< 4580	< 23600	< 4410	R	< 450	< 121000	< 4210	< 4730
o,p-Toluidine	< 11700	< 11700	< 60100	< 11300	R	< 1140	< 307000	< 10700	< 12100
o-Cresol	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
o-Nitrotoluene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
p-Chloroaniline	< 2290	< 2290	77400	< 2210	R	3300	268000	10600	< 2360
p-Dimethylaminoazobenzene	< 2290	< 2290	< 11800	< 2210	R	< 220	< 60300	< 2110	< 2360
p-Nitrotoluene	< 3430	< 3430	< 17700	< 3310	R	< 330	< 90400	< 3160	< 3550
Metals (µg/kg)									
Antimony	< 458 J	< 458 J	< 472 J	< 441 J	< 472 J	< 446 J	< 482 J	< 421 J	< 473 J
Cadmium	1092	919	1394	657	781	< 450	733	2359	853
Chromium	17093	18241	16497	14001	16623	24851	14079	12882	9636
Lead	16413	14357	35259	91212	13421	16877	123342	16748	17619
Nickel	30402J	136246J	1224000J	15860100J	342144J	50914J	23241000J	178934J	18268J
Miscellaneous (µg/kg)									
Percent Moisture	12.6%	12.6%	15.2%	9.38%	15.2%	10.3%	22.0%	5.07%	15.4%
Total Organic Carbon	NA	NA	NA	NA	NA	2300000	25000000 J	NA	NA
BTU from ECD	< 500 BTU	< 500 BTU	Negative	NA	NA	< 500 BTU	4250 BTU	NA	NA
Ignitability (Flash Point) for S	NA	NA	NA	NA	Negative	Negative	Positive	NA	NA
Percent Ash	NA	NA	NA	NA	66 %	74 %	51 %	NA	NA

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, Additional inform

U=Nondetect at reported limit

<=Nondetect at reported limit

LE 4.4-1
Semi-
Annual Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB05-1618	SM007-TB06-0001	SM007-TB06-0001	SM007-TB06-0305	SM007-TB06-0810	SM007-TB06-1517	M007-TB06-1517F	SM007-TB07-0001	SM007-TB07-0001
SAMPLE DEPTH(ft)	16.00-18.00	0.00-1.00	0.00-1.00	3.00-5.00	8.00-10.00	15.00-17.00	15.00-17.00	0.00-1.00	0.00-1.00
SAMPLE LOCATION	TB05	TB06	TB06	TB06	TB06	TB06	TB06	TB07	TB07
SAMPLE DATE	6/20/1997	6/20/1997	11/11/1999	6/20/1997	6/20/1997	7/15/1997	7/22/1997	6/23/1997	11/11/1999
PARAMETER									
Volatiles (µg/kg)									
1,1,2-Tetrachloroethane	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
1,1,1-Trichloroethane	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
1,1,2,2-Tetrachloroethane	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
1,1,2-Trichloroethane	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
1,1-Dichloroethane	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
1,1-Dichloroethene	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
1,1-Dichloropropene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
1,2,3-Trichlorobenzene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
1,2,3-Trichloropropane	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
1,2,4-Trichlorobenzene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	2340	NA
1,2,4-Trimethylbenzene	607 J	1590 J	NA	< 158	< 164	< 155	< 155	< 145	NA
1,2-Dibromo-3-chloropropane	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
1,2-Dibromoethane	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
1,2-Dichlorobenzene	< 298	101000	NA	864	< 314	955	1790	13400	NA
1,2-Dichloroethane	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
1,2-Dichloropropane	< 452	< 3170	NA	< 462	< 478	< 453	< 453	< 423	NA
1,3,5-Trimethylbenzene	250 J	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
1,3-Dichlorobenzene	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
1,3-Dichloropropane	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
1,4-Dichlorobenzene	< 298	2960 J	NA	< 304	< 314	< 298	< 298	< 278	NA
2,2-Dichloropropane	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
2-Butanone	< 1050	< 7400	NA	< 1070	< 1110	< 1050	< 1050	< 980	NA
2-Chloroethyl Vinyl Ether	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
2-Chlorotoluene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
2-Hexanone	< 452	< 3170	NA	< 462	< 478	< 453	< 453	< 423	NA
4-Chlorotoluene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
4-Methyl-2-pentanone	< 452	< 3170	NA	< 462	< 478	< 453	< 453	< 423	NA
Acetone	< 1050	< 7400	NA	< 1070	< 1110	< 1050	< 1050	< 980	NA
Acrolein	< 2980	< 21100	NA	< 3040	< 3140	< 2980	< 2980	< 2780	NA
Acrylonitrile	< 1550	< 10600	NA	< 1580	< 1640	< 1550	< 1550	< 1450	NA
Allyl Chloride	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
Benzene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	212 J	NA
Bromobenzene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
Bromochloromethane	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
Bromodichloromethane	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
Bromoform	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
Bromomethane	< 452	< 3170	NA	< 462	< 478	< 453	< 453	< 423	NA
Carbon Disulfide	< 452	< 3170	NA	< 462	< 478	< 453	< 453	< 423	NA
Carbon Tetrachloride	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
Chlorobenzene	< 155	729000	NA	2190	1380	4770	7400	56800	NA
Chloroethane	< 452	< 3170	NA	< 462	< 478	< 453	< 453	< 423	NA
Chloroform	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
Chloromethane	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
Dibromochloromethane	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
Dibromomethane	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
Dichlorodifluoromethane	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
Ethyl Methacrylate	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
Ethylbenzene	< 155	1270 J	NA	< 158	< 164	< 155	< 155	1220	NA
Freon 113	< 298	< 2110	NA	681 JB	1890 B	776 J	< 298	< 278	NA
Freon 141b	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
Hexachlorobutadiene	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
Isopropylbenzene	< 452	< 3170	NA	< 462	< 478	< 453	< 453	< 423	NA
Methyl Iodide	< 452	< 3170	NA	< 462	< 478	< 453	< 453	< 423	NA
Methylene Chloride	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM007-TB05-1618 16.00-18.00 TB05 6/20/1997	SM007-TB06-0001 0.00-1.00 TB06 6/20/1997	SM007-TB06-0001 0.00-1.00 TB06 11/11/1999	SM007-TB06-0305 3.00-5.00 TB06 6/20/1997	SM007-TB06-0810 8.00-10.00 TB06 6/20/1997	SM007-TB06-1517 15.00-17.00 TB06 7/15/1997	M007-TB06-1517F 15.00-17.00 TB06 7/22/1997	SM007-TB07-0001 0.00-1.00 TB07 6/23/1997	SM007-TB07-0001 0.00-1.00 TB07 11/11/1999
Naphthalene	< 155	3700 J	NA	< 158	< 164	< 155	< 155	< 145	NA
Styrene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
Tetrachloroethene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
Toluene	< 155	32800	NA	< 158	< 164	< 155	< 155	5010 J	NA
Trichloroethene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
Trichlorofluoromethane	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
Vinyl Acetate	< 452	< 3170	NA	< 462	< 478	< 453	< 453	< 423	NA
Vinyl Chloride	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
cis-1,2-Dichloroethene	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
cis-1,3-Dichloropropene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
m+p-Xylene	< 155	5390	NA	< 158	< 164	< 155	< 155	4120	NA
n-Butylbenzene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
n-Propylbenzene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
o-Xylene	< 155	2750 J	NA	< 158	< 164	< 155	< 155	1110	NA
p-Isopropyltoluene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	167 J	NA
sec-Butylbenzene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
tert-Butylbenzene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
trans-1,2-Dichloroethene	< 298	< 2110	NA	< 304	< 314	< 298	< 298	< 278	NA
trans-1,3-Dichloropropene	< 155	< 1060	NA	< 158	< 164	< 155	< 155	< 145	NA
trans-1,4-Dichloro-2-butene	< 1550	< 10600	NA	< 1580	< 1640	< 1550	< 1550	< 1450	NA
Semivolatiles (µg/kg)									
1,2,3-Trichlorobenzene	< 290	R	<12000	<2920	R	<28600	NA	R	<120
1,2,4,5-Tetrachlorobenzene	< 290	R	<13000	<2920	R	<28600	NA	R	<130
1,2,4-Trichlorobenzene	< 240	R	<12000	<2430	R	<23900	NA	R	<120
1,2-Dichlorobenzene	310	124000 J	18000	< 2430	R	70900	NA	R	170
1,3-Dichlorobenzene	< 240	R	<9800	<2430	R	<23900	NA	R	<95
1,4-Dichlorobenzene	< 240	R	<11000	<2430	R	<23900	NA	R	<110
1-Chloronaphthalene	< 600	R	<11000	< 6080	R	< 59700	NA	R	<110
1-Methylnaphthalene	< 240	35300 J	<12000	< 2430	R	< 23900	NA	R	<120
1-Naphthylamine	< 810	R	<94000	< 8270	R	< 81200	NA	R	<920
2,3,4,6-Tetrachlorophenol	< 480	R	<9800	< 4870	R	< 47700	NA	R	<95
2,3-Dichloroaniline	< 240	R	<12000	< 2430	R	< 23900	NA	R	<120
2,4,5-Trichlorophenol	< 240	R	<9800	< 2430	R	< 23900	NA	R	<95
2,4,6-Trichlorophenol	< 240	R	<12000	< 2430	R	< 23900	NA	R	<120
2,4-Dichlorophenol	< 240	R	<13000	< 2430	R	< 23900	NA	R	<130
2,4-Dimethylphenol	< 240	R	<13000	< 2430	R	< 23900	NA	R	<130
2,4-Dinitrophenol	< 1480	R	<85000	< 15100	R	< 148000	NA	R	<830
2,4-Dinitrotoluene	< 240	R	1600000	251000	R	< 23900	NA	R	370
2,4-Toluenediamine	< 1190	R	23000UJ	75900	R	< 119000	NA	R	<600
2,6-Dichlorophenol	< 240	R	<13000	< 2430	R	< 23900	NA	R	<130
2,6-Dinitrotoluene	< 240	R	380000	29200	R	< 23900	NA	R	<130
2-Chloronaphthalene	< 240	R	<13000	< 2430	R	< 23900	NA	R	<130
2-Chlorophenol	< 240	R	<11000	< 2430	R	< 23900	NA	R	<110
2-Methylnaphthalene	< 240	56400 J	<12000	< 2430	R	< 23900	NA	R	<120
2-Naphthylamine	< 900	R	<76000	< 9250	R	< 90700	NA	R	<740
2-Nitroaniline	< 290	R	<12000	< 2920	R	< 28600	NA	R	<120
2-Nitrodiphenylamine	< 240	R	<9800	< 2430	R	< 23900	NA	R	<95
2-Nitrophenol	< 240	R	<11000	< 2430	R	< 23900	NA	R	<110
2-Picoline	< 880	R	<11000	< 9000	R	< 88300	NA	R	<110
3,3'-Dichlorobenzidine	< 1450	R	<29000	< 14800	R	< 146000	NA	R	<290
3-Methylcholanthrene	< 240	R	<13000	< 2430	R	< 23900	NA	R	<130
3-Nitroaniline	< 240	R	<7300	< 2430	R	< 23900	NA	R	<71
4,4'-Methylenedianiline	< 2100	R	<160000	< 21400	R	< 210000	NA	R	<1500
4,6-Dinitro-o-cresol	< 240	R	<42000	< 2430	R	< 23900	NA	R	<400

LE 4.4-1
Semi-
Chemical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB05-1618	SM007-TB06-0001	SM007-TB06-0001	SM007-TB06-0305	SM007-TB06-0810	SM007-TB06-1517	M007-TB06-1517F	SM007-TB07-0001	SM007-TB07-0001
SAMPLE DEPTH(ft)	16.00-18.00	0.00-1.00	0.00-1.00	3.00-5.00	8.00-10.00	15.00-17.00	15.00-17.00	0.00-1.00	0.00-1.00
SAMPLE LOCATION	TB05	TB06	TB06	TB06	TB06	TB06	TB06	TB07	TB07
SAMPLE DATE	6/20/1997	6/20/1997	11/11/1999	6/20/1997	6/20/1997	7/15/1997	7/22/1997	6/23/1997	11/11/1999
PARAMETER									
4-Aminobiphenyl	< 240	R	<60000	< 2430	R	< 23900	NA	R	<580
4-Aminodiphenylamine	< 600	R	NA	< 6080	R	< 59700	NA	R	NA
4-Bromophenyl phenyl ether	< 240	R	<13000	< 2430	R	< 23900	NA	R	<130
4-Chloro-m-cresol	< 240	R	<16000	< 2430	R	< 23900	NA	R	<150
4-Chlorophenylphenyl ether	< 240	R	<12000	< 2430	R	< 23900	NA	R	<120
4-Nitroaniline	< 240	R	<9800	< 2430	R	< 23900	NA	R	<95
4-Nitrophenol	< 240 J	R	<3800	< 2430 J	R	< 23900 J	NA	R	<370
5-Nitro-o-toluidine	< 240	R	160000	63800	R	< 23900	NA	R	<110
7,12-dimethylbenz[a]anthracene	< 240	R	<17000	< 2430	R	< 23900	NA	R	<170
Acenaphthene	< 240	R	<13000	< 2430	R	< 23900	NA	R	<130
Acenaphthylene	< 240	R	<13000	< 2430	R	< 23900	NA	R	<130
Acetophenone	< 310	R	<11000	< 3160	R	< 31000	NA	R	<110
Aniline	< 330	R	<54000	< 3410	R	809000	NA	R	<520
Anthracene	< 240	R	<11000	< 2430	R	< 23900	NA	R	<110
Azobenzene	< 290	R	<13000	< 2920	R	< 28600	NA	R	<130
Benzidine	< 3810	R	<160000	< 38900	R	< 382000	NA	R	<1500
Benz(a)anthracene	< 310	R	<13000	< 3160	R	< 31000	NA	R	<130
Benz(a)pyrene	< 240	R	<13000	< 2430	R	< 23900	NA	R	<130
Benz(b)fluoranthene	< 240	R	<11000	< 2430	R	< 23900	NA	R	<110
Benz(ghi)perylene	< 260	R	<22000	< 2680	R	< 26300	NA	R	<210
Benz(k)fluoranthene	< 240	R	<15000	< 2430	R	< 23900	NA	R	<140
Benzoic Acid	< 240	R	<130000	< 2430	R	< 23900	NA	R	<1300
Benzyl Alcohol	< 240	R	<11000	< 2430	R	< 23900	NA	R	<110
Benzyl butyl phthalate	< 240	R	<12000	< 2430	R	< 23900	NA	R	<120
Bis(2-chloroethoxy)methane	< 240	R	<12000	< 2430	R	< 23900	NA	R	<120
Bis(2-chloroethyl)ether	< 240	R	<11000	< 2430	R	< 23900	NA	R	<110
Bis(2-chloroisopropyl)ether	< 240	R	<11000	< 2430	R	< 23900	NA	R	<110
Bis(2-ethylhexyl) phthalate	980 B	R	<13000	< 2920	R	< 28600	NA	R	<130
Bisphenol A	640	187000 J	<18000	27700	R	< 43000	NA	R	330
Carbazole	< 1190	R	<8500	< 12200	R	< 119000	NA	R	<83
Chrysene	< 240	R	<13000	< 2430	R	< 23900	NA	R	<130
Cyclohexanone	< 240	R	<6100	< 2430	R	325000	NA	R	<60
Di-n-butyl phthalate	4430 B	R	<11000	6010 B	R	< 23900	NA	R	120UB
Di-n-octyl phthalate	< 240	R	<15000	< 2430	R	< 23900	NA	R	<140
Dibenzo(a,h)anthracene	< 240	R	<16000	< 2430	R	< 23900	NA	R	<150
Dibenzofuran	< 240	R	<11000	< 2430	R	< 23900	NA	R	<110
Diethyl Phthalate	< 240	R	26000	< 2430	R	< 23900	NA	R	<110
Dimethylphthalate	< 240	R	<11000	< 2430	R	< 23900	NA	R	<110
Ethyl Methane Sulfonate	< 430	R	<9800	< 4380	R	< 43000	NA	R	<95
Fluoranthene	< 240	R	<12000	< 2430	R	< 23900	NA	R	<120
Fluorene	< 240 J	R	<13000	< 2430 J	R	< 23900 J	NA	R	<130
Heptachlor	< 260	R	<9800	< 2680	R	< 26300	NA	R	<95
Hexachlorobenzene	< 240	R	<17000	< 2430	R	< 23900	NA	R	<170
Hexachlorobutadiene	< 240	R	<11000	< 2430	R	< 23900	NA	R	<110
Hexachlorocyclopentadiene	< 240	R	<160000	< 2430	R	< 23900	NA	R	<1600
Hexachloroethane	< 240	R	<11000	< 2430	R	< 23900	NA	R	<110
Indeno(1,2,3-cd)pyrene	< 240	R	<17000	< 2430	R	< 23900	NA	R	<170
Isophorone	< 240	R	<15000	< 2430	R	< 23900	NA	R	<140
Methyl methane sulfonate	< 240	R	<12000	< 2430	R	< 23900	NA	R	<120
N-Nitrosodibutylamine	< 240	R	<15000	< 2430	R	< 23900	NA	R	<140
N-Nitrosodimethylamine	< 240 J	R	<11000	< 2430 J	R	< 23900 J	NA	R	<110

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB05-1618	SAMPLE DEPTH(ft)	16.00-18.00	SAMPLE LOCATION	TB05	SAMPLE DATE	6/20/1997	SM007-TB06-0001	0.00-1.00	SM007-TB06-0001	0.00-1.00	SM007-TB06-0305	3.00-5.00	SM007-TB06-0810	8.00-10.00	SM007-TB06-1517	15.00-17.00	M007-TB06-1517F	15.00-17.00	SM007-TB07-0001	0.00-1.00	SM007-TB07-0001	0.00-1.00
PARAMETER																							
N-Nitrosodiphenylamine	< 310	R		<34000		< 3160		R		< 31000		NA		R		<330							
N-Nitrosodipropylamine	< 240	R		<11000		< 2430		R		< 23900		NA		R		<110							
N-Nitrosopiperidine	< 240	R		<12000		< 2430		R		< 23900		NA		R		<120							
Naphthalene	< 240	R		<12000		< 2430		R		< 23900		NA		R		<120							
Nitrobenzene	< 240	R		<11000		< 2430		R		< 23900		NA		R		<110							
Pentachlorobenzene	< 400	R		<13000		< 4140		R		< 40600		NA		R		<130							
Pentachloronitrobenzene	< 240	R		<8500		< 2430		R		< 23900		NA		R		<83							
Pentachlorophenol	< 240	R		<31000		< 2430		R		< 23900		NA		R		<300							
Phenacetin	< 240	R		<11000		< 2430		R		< 23900		NA		R		<110							
Phenanthrene	< 240		19100 J		<12000		< 2430		R		< 23900		NA		R		<120						
Phenol	< 140	R		<12000		< 1460		R		< 14300		NA		R		<120							
Pyrene	< 240	R		<13000		< 2430		R		< 23900		NA		R		<130							
Pyridine	< 260	R		<11000		< 2680		R		< 26300		NA		R		<110							
Trimethylphosphate	< 240	R		<11000		< 2430		R		< 23900		NA		R		<110							
Triphenylphosphate	< 1190	R		<16000		< 12200		R		< 119000		NA		R		<150							
m,p-Cresol	< 360	R		<22000		< 3650		R		< 35800		NA		R		<210							
m-Nitrotoluene	< 240	R		26000		3990		R		< 23900		NA		R		<120							
m-Toluidine	< 480	R		<9800		< 4870		R		< 47700		NA		R		<95							
o,p-Toluidine	< 1210	R		26000		24300		R		< 122000		NA		R		110							
o-Cresol	< 240	R		<9800		< 2430		R		< 23900		NA		R		<95							
o-Nitrotoluene	< 240	R		270000		28700		R		< 23900		NA		R		<130							
p-Chloroaniline	< 240		10900 J		27000		15900		R		< 23900		NA		R		<95						
p-Dimethylaminoazobenzene	< 240	R		<16000		< 2430		R		< 23900		NA		R		<150							
p-Nitrotoluene	< 360	R		12000		< 3650		R		< 35800		NA		R		<110							
Metals (µg/kg)																							
Antimony	< 476 J		< 423 J		NA		< 487 J			< 503 J		< 477 J		NA		< 445 J		NA					
Cadmium	796		3235		NA		736			16713		< 480		NA		1818		NA					
Chromium	10336		7693		NA		17140			29860		10586		NA		308582		NA					
Lead	11526		16697		NA		13697			1037292		10028		NA		25939		NA					
Nickel	12006 J		184854 J		NA		220380 J			29091110 J		27017 J		NA		801044 J		NA					
Miscellaneous (µg/kg)																							
Percent Moisture	16.0%		5.39%		18.1%		17.8%			20.5%		16.2%		16.2%		10.2%		16.0%					
Total Organic Carbon	NA		NA		NA		NA			NA		NA		NA		NA		NA					
BTU from ECD	NA		NA		NA		NA			NA		NA		NA		NA		NA					
Ignitability (Flash Point) for S	NA		NA		NA		NA			NA		NA		NA		NA		NA					
Percent Ash	NA		NA		NA		NA			NA		NA		NA		NA		NA					

Notes:

NA=Not analyzed

NA=Not analyzed
B=Blank contamination

I=Estimated concentration

J-Estimated concentration

R=Estimated concentration

I=Non-detect at reported limit

U=Nondetect at reported limit

<=Nondetect at reported limit

Table 4.4-1
Statistical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB07-0305	SM007-TB07-1719	SM007-TB08-0001	SM007-TB08-0001	SM007-TB08-0305	SM007-TB08-1517	SM007-TB09-0001	SM007-TB09-0305	SM007-TB09-1618
SAMPLE DEPTH(ft)	3.00-5.00	17.00-19.00	0.00-1.00	0.00-1.00	3.00-5.00	15.00-17.00	0.00-1.00	3.00-5.00	16.00-18.00
SAMPLE LOCATION	TB07	TB07	TB08	TB08	TB08	TB08	TB09	TB09	TB09
PARAMETER	6/23/1997	6/23/1997	6/20/1997	11/10/1999	6/20/1997	7/17/1997	6/23/1997	6/23/1997	6/23/1997
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286
1,1,1-Trichloroethane	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
1,1,2,2-Tetrachloroethane	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
1,1,2-Trichloroethane	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286
1,1-Dichloroethane	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
1,1-Dichloroethene	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286
1,1-Dichloropropene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
1,2,3-Trichlorobenzene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
1,2,3-Trichloropropane	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
1,2,4-Trichlorobenzene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
1,2,4-Trimethylbenzene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
1,2-Dibromo-3-chloropropane	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286
1,2-Dibromoethane	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
1,2-Dichlorobenzene	582 J	3610	730	NA	7920	9010	747	9550	515 J
1,2-Dichloroethane	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286
1,2-Dichloropropene	< 442	< 458	< 426	NA	< 456	< 428	< 417	< 432	< 435
1,3,5-Trimethylbenzene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
1,3-Dichlorobenzene	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286
1,3-Dichloropropane	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
1,4-Dichlorobenzene	< 291	361 J	< 281	NA	456 J	743	< 275	614 J	< 286
2,2-Dichloropropane	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
2-Butanone	< 1020	< 1060	< 988	NA	< 1060	< 991	< 967	< 1000	< 1010
2-Chloroethyl Vinyl Ether	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286
2-Chlorotoluene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
2-Hexanone	< 442	< 458	< 426	NA	< 456	< 428	< 417	< 432	< 435
4-Chlorotoluene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
4-Methyl-2-pentanone	< 442	< 458	< 426	NA	< 456	< 428	< 417	< 432	< 435
Acetone	< 1020	< 1060	< 988	NA	< 1060	< 991	< 967	< 1000	< 1010
Acrolein	< 2910	< 3010	< 2810	NA	< 3000	< 2820	< 2750	< 2840	< 2860
Acrylonitrile	< 1510	< 1570	< 1460	NA	< 1560	< 1460	< 1430	< 1480	< 1490
Aliyl Chloride	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
Benzene	< 151 J	< 157 J	< 146	NA	< 156	541 J	< 143 J	< 148 J	< 149 J
Bromobenzene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
Bromochloromethane	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
Bromodichloromethane	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286
Bromoform	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
Bromomethane	< 442	< 458	< 426	NA	< 456	< 428	< 417	< 432	< 435
Carbon Disulfide	< 442	< 458	< 426	NA	< 456	< 428	< 417	< 432	< 435
Carbon Tetrachloride	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
Chlorobenzene	4190	5780	595 J	NA	7200	21400	615 J	761	< 149
Chloroethane	< 442	< 458	< 426	NA	< 456	< 428	< 417	< 432	< 435
Chloroform	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
Chloromethane	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286
Dibromochloromethane	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
Dibromomethane	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
Dichlorodifluoromethane	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286
Ethyl Methacrylate	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
Ethylbenzene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
Freon 113	< 291	< 301	595 JB	NA	< 300	< 282	< 275	< 284	< 286
Freon 141b	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
Hexachlorobutadiene	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286
Isopropylbenzene	< 442	< 458	< 426	NA	< 456	< 428	< 417	< 432	< 435
Methyl Iodide	< 442	< 458	< 426	NA	< 456	< 428	< 417	< 432	< 435
Methylene Chloride	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB07-0305	SM007-TB07-1719	SM007-TB08-0001	SM007-TB08-0001	SM007-TB08-0305	SM007-TB08-1517	SM007-TB09-0001	SM007-TB09-0305	SM007-TB09-1618
SAMPLE DEPTH(ft)	3.00-5.00	17.00-19.00	0.00-1.00	0.00-1.00	3.00-5.00	15.00-17.00	0.00-1.00	3.00-5.00	16.00-18.00
SAMPLE LOCATION	TB07	TB07	TB08	TB08	TB08	TB08	TB09	TB09	TB09
PARAMETER									
Naphthalene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
Styrene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
Tetrachloroethene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
Toluene	< 151 J	< 157 J	< 146	NA	< 156	< 146	< 143 J	< 148 J	< 149 J
Trichloroethene	< 151	< 157	< 146	NA	< 156	1350	< 143	< 148	< 149
Trichlorofluoromethane	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286
Vinyl Acetate	< 442	< 458	< 426	NA	< 456	< 428	< 417	< 432	< 435
Vinyl Chloride	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286
cis-1,2-Dichloroethene	< 291	< 301	< 281	NA	< 300	372 J	< 275	< 284	< 286
cis-1,3-Dichloropropene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
m+p-Xylene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
n-Butylbenzene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
n-Propylbenzene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
o-Xylene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
p-Isopropyltoluene	< 151	< 157	< 146	NA	564 J	653 J	220 J	398 J	< 149
sec-Butylbenzene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
tert-Butylbenzene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
trans-1,2-Dichloroethene	< 291	< 301	< 281	NA	< 300	< 282	< 275	< 284	< 286
trans-1,3-Dichloropropene	< 151	< 157	< 146	NA	< 156	< 146	< 143	< 148	< 149
trans-1,4-Dichloro-2-butene	< 1510	< 1570	< 1460	NA	< 1560	< 1460	< 1430	< 1480	< 1490
Semivolatiles (µg/kg)	R	R	< 2690	< 120	< 290	< 1350	< 2640	< 2730	< 13800
1,2,3-Trichlorobenzene	R	R	< 2690	< 130	< 290	< 1350	< 2640	< 2730	< 13800
1,2,4,5-Tetrachlorobenzene	R	R	< 2240	< 120	< 240	< 1130	< 2200	< 2270	< 11500
1,2,4-Trichlorobenzene	R	R	< 2240	< 120	< 240	< 1130	< 2200	< 2270	< 11500
2,2-Dichlorobenzene	R	R	3930	5800	14200	30100	8830	6640	< 11500
1,3-Dichlorobenzene	R	R	< 2240	< 93	< 240	< 1130	< 2200	< 2270	< 11500
1,4-Dichlorobenzene	R	R	< 2240	350	590	2040	< 2200	< 2270	< 11500
1-Chloronaphthalene	R	R	< 5610	< 100	< 600	< 2820	< 5490	< 5680	< 28600
1-Methylnaphthalene	R	R	< 2240	< 120	< 240	< 1130	< 2200	< 2270	< 11500
1-Naphthylamine	R	R	< 7630	< 890	< 820	< 3830	< 7470	< 7730	< 39000
2,3,4,6-Tetrachlorophenol	R	R	< 4490	< 93	< 480	< 2250	< 4390	< 4550	< 22900
2,3-Dichloroaniline	R	R	< 2240	< 120	< 240	< 1130	< 2200	< 2270	< 11500
2,4,5-Trichlorophenol	R	R	< 2240	< 93	< 240	< 1130	< 2200	< 2270	< 11500
2,4,6-Trichlorophenol	R	R	< 2240	< 120	< 240	< 1130	< 2200	< 2270	< 11500
2,4-Dichlorophenol	R	R	< 2240	< 130	< 240	< 1130	< 2200	< 2270	< 11500
2,4-Dimethylphenol	R	R	< 2240	< 130	< 240	< 1130	< 2200	< 2270	< 11500
2,4-Dinitrophenol	R	R	< 13900	< 810	< 1490	< 6980	< 13600	< 14100	< 71000
2,4-Dinitrotoluene	R	R	< 2240	730	250	6450	< 2200	< 2270	368000
2,4-Toluenediamine	R	R	< 11200	1300UJ	< 1200	< 5630	< 11000	74100	< 57300
2,6-Dichlorophenol	R	R	< 2240	< 130	< 240	< 1130	< 2200	< 2270	< 11500
2,6-Dinitrotoluene	R	R	< 2240	200	< 240	1150	< 2200	320000	31500
2-Chloronaphthalene	R	R	< 2240	< 130	< 240	< 1130	< 2200	< 2270	< 11500
2-Chlorophenol	R	R	< 2240	< 100	< 240	< 1130	< 2200	< 2270	< 11500
2-Methylnaphthalene	R	R	< 2240	< 120	< 240	< 1130	< 2200	< 2270	< 11500
2-Naphthylamine	R	R	< 8530	< 720	< 910	< 4280	< 8350	< 8640	< 43500
2-Nitroaniline	R	R	< 2690	< 120	< 290	< 1350	< 2640	< 2730	< 13800
2-Nitrodiphenylamine	R	R	< 2240	< 93	< 240	< 1130	< 2200	< 2270	< 11500
2-Nitrophenol	R	R	< 2240	< 100	< 240	< 1130	< 2200	< 2270	< 11500
2-Picoline	R	R	< 8310	< 100	< 890	< 4170	< 8130	< 8410	< 42400
3,3'-Dichlorobenzidine	R	R	< 13700	< 280	< 1460	< 6870	< 13400	< 13900	< 69900
3-Methylcholanthrene	R	R	< 2240	< 130	< 240	< 1130	< 2200	< 2270	< 11500
3-Nitroaniline	R	R	< 2240	< 70	< 240	< 1130	< 2200	< 2270	< 11500
4,4'-Methylenedianiline	R	R	< 19800	< 1500	< 2110	< 9910	< 19300	79100	< 101000
4,6-Dinitro-o-cresol	R	R	< 2240	< 390	< 240	< 1130	< 2200	< 2270	< 11500

Table 4.4-1
Statistical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB07-0305	SM007-TB07-1719	SM007-TB08-0001	SM007-TB08-0001	SM007-TB08-0305	SM007-TB08-1517	SM007-TB09-0001	SM007-TB09-0305	SM007-TB09-1618
SAMPLE DEPTH(ft)	3.00-5.00	17.00-19.00	0.00-1.00	0.00-1.00	3.00-5.00	15.00-17.00	0.00-1.00	3.00-5.00	16.00-18.00
SAMPLE LOCATION	TB07	TB07	TB08	TB08	TB08	TB08	TB09	TB09	TB09
PARAMETER									
4-Aminobiphenyl	R	R	<2240	<570	<240	<1130	<2200	<2270	<11500
4-Aminodiphenylamine	R	R	<5610	NA	<600	<2820	<5490	<5680	<28600
4-Bromophenyl phenyl ether	R	R	<2240	<130	<240	<1130	<2200	<2270	<11500
4-Chloro-m-cresol	R	R	<2240	<150	<240	<1130	<2200	<2270	<11500
4-Chlorophenylphenyl ether	R	R	<2240	<120	<240	<1130	<2200	<2270	<11500
4-Nitroaniline	R	R	<2240	<93	<240	<1130	<2200	<2270	<11500
4-Nitrophenol	R	R	<2240 J	<360	<240 J	<1130 J	<2200 J	<2270 J	<11500 J
5-Nitro-o-toluidine	R	R	<2240	190	<240	<1130	<2200	4980	<11500
7,12-dimethylbenz[a]anthracene	R	R	<2240	<160	<240	<1130	<2200	<2270	<11500
Acenaphthene	R	R	<2240	<130	<240	<1130	<2200	<2270	<11500
Acenaphthylene	R	R	<2240	<130	<240	<1130	<2200	<2270	<11500
Acetophenone	R	R	<2920	<100	<310	<1460	<2860	<2950	<14900
Aniline	R	R	<3140	1100	<340	<1580	<3080	7640	<16000
Anthracene	R	R	<2240	<100	<240	<1130	<2200	<2270	<11500
Azobenzene	R	R	<2690	<130	<290	<1350	<2640	<2730	<13800
Benzidine	R	R	<35900	<1500	<3840	<18000	<35200	<36400	<183000
Benzo(a)anthracene	R	R	<2920	<130	<310	<1460	<2860	<2950	<14900
Benzo(a)pyrene	R	R	<2240	<130	<240	<1130	<2200	<2270	<11500
Benzo(b)fluoranthene	R	R	<2240	<140	<240	<1130	<2200	<2270	<11500
Benzo(ghi)perylene	R	R	<2470	<210	<260	<1240	<2420	<2500	<12600
Benzo(k)fluoranthene	R	R	<2240	<140	<240	<1130	<2200	<2270	<11500
Benzoic Acid	R	R	<2240	<1300	<240	<1130	<2200	<2270	<11500
Benzyl Alcohol	R	R	<2240	<100	<240	<1130	<2200	<2270	<11500
Benzyl butyl phthalate	R	R	<2240	<120	<240	<1130	<2200	<2270	<11500
Bis(2-chloroethoxy methane)	R	R	<2240	<120	<240	<1130	<2200	<2270	<11500
Bis(2-chloroethyl)ether	R	R	<2240	<100	<240	<1130	<2200	<2270	<11500
Bis(2-chloroisopropyl)ether	R	R	<2240	<100	<240	<1130	<2200	<2270	<11500
Bis(2-ethylhexyl) phthalate	R	R	<2690	<130	410 B	1520 B	<2640	<2730	<13800
Bisphenol A	R	18800 J	8280	12000	16700	72800	11200	122000	53000
Carbazole	R	R	<11200	<81	<1200	<5630	<11000	<11400	<57300
Chrysene	R	R	<2240	<130	<240	<1130	<2200	<2270	<11500
Cyclohexanone	R	R	<2240	<58	<240	<1130	<2200	<2270	<11500
Di-n-butyl phthalate	R	R	4580 B	130B	3220 B	2160 B	<2200	<2270	<11500
Di-n-octyl phthalate	R	R	<2240	<140	<240	<1130	<2200	<2270	<11500
Dibenzo(a,h)anthracene	R	R	<2240	<150	<240	<1130	<2200	<2270	<11500
Dibenzofuran	R	R	<2240	<100	<240	<1130	<2200	<2270	<11500
Diethyl Phthalate	R	R	<2240	<100	<240	<1130	<2200	<2270	<11500
Dimethylphthalate	R	R	<2240	310	<240	<1130	<2200	<2270	<11500
Ethyl Methane Sulfonate	R	R	<4040	<93	<430	<2030	<3950	<4090	<20600
Fluoranthene	R	R	<2240	<120	<240	<1130	<2200	<2270	<11500
Fluorene	R	R	<2240 J	<130	<240 J	<1130 J	<2200 J	<2270 J	<11500 J
Heptachlor	R	R	<2470	<93	<260	<1240	<2420	<2500	<12600
Hexachlorobenzene	R	R	<2240	<160	<240	<1130	<2200	<2270	<11500
Hexachlorobutadiene	R	R	<2240	<100	<240	<1130	<2200	<2270	<11500
Hexachlorocyclopentadiene	R	R	<2240	<1600	<240	<1130	<2200	<2270	<11500
Hexachloroethane	R	R	<2240	<100	<240	<1130	<2200	<2270	<11500
Indeno(1,2,3-cd)pyrene	R	R	<2240	<160	<240	<1130	<2200	<2270	<11500
Iso phorone	R	R	<2240	<140	<240	<1130	<2200	<2270	<11500
Methyl methane sulfonate	R	R	<2240	<120	<240	<1130	<2200	<2270	<11500
N-Nitrosodibutylamine	R	R	<2240	<140	<240	<1130	<2200	<2270	<11500
N-Nitrosodimethylamine	R	R	<2240 J	<100	<240 J	<1130 J	<2200 J	<2270 J	<11500 J

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB07-0305	SM007-TB07-1719	SM007-TB08-0001	SM007-TB08-0001	SM007-TB08-0305	SM007-TB08-1517	SM007-TB09-0001	SM007-TB09-0305	SM007-TB09-1618
SAMPLE DEPTH(ft)	3.00-5.00	17.00-19.00	0.00-1.00	0.00-1.00	3.00-5.00	15.00-17.00	0.00-1.00	3.00-5.00	16.00-18.00
SAMPLE LOCATION	TB07	TB07	TB08	TB08	TB08	TB08	TB09	TB09	TB09
SAMPLE DATE	6/23/1997	6/23/1997	6/20/1997	11/10/1999	6/20/1997	7/17/1997	6/23/1997	6/23/1997	6/23/1997
PARAMETER									
N-Nitrosodiphenylamine	R	R	<2920	<120	<310	<1460	<2860	<2950	<14900
N-Nitrosodipropylamine	R	R	<2240	<100	<240	<1130	<2200	<2270	<11500
N-Nitrosopiperidine	R	R	<2240	<120	<240	<1130	<2200	<2270	<11500
Naphthalene	R	R	<2240	<120	<240	<1130	<2200	<2270	<11500
Nitrobenzene	R	R	<2240	<100	<240	<1130	<2200	<2270	<11500
Pentachlorobenzene	R	R	<3820	<130	<410	<1910	<3730	<3860	<19500
Pentachloronitrobenzene	R	R	<2240	<81	<240	<1130	<2200	<2270	<11500
Pentachlorophenol	R	R	<2240	<290	<240	<1130	<2200	<2270	<11500
Phenacetin	R	R	<2240	<100	<240	<1130	<2200	<2270	<11500
Phenanthrene	R	R	<2240	<120	<240	<1130	<2200	<2270	<11500
Phenol	R	7950 J	<1350	<120	<140	<680	<1320	<1360	<6870
Pyrene	R	R	<2240	<130	<240	<1130	<2200	<2270	<11500
Pyridine	R	R	<2470	<100	<260	<1240	<2420	<2500	<12600
Trimethylphosphate	R	R	<2240	<100	<240	<1130	<2200	<2270	<11500
Triphenylphosphate	R	R	<11200	<150	<1200	<5630	<10000	<11400	<57300
m,p-Cresol	R	R	<3370	<210	<360	<1690	<3300	<3410	<17200
m-Nitrotoluene	R	R	<2240	<120	<240	<1130	<2200	6610	<11500
m-Toluidine	R	R	<4490	<93	<480	<2250	<4390	<4550	<22900
o,p-Toluidine	R	R	<11500	230	<1220	<5740	<11200	<11600	<58400
o-Cresol	R	R	<2240	<93	<240	<1130	<2200	<2270	<11500
o-Nitrotoluene	R	R	<2240	<130	<240	<1130	<2200	83200	<11500
p-Chloroaniline	R	R	7520	4300	330	7500	<2200	<2270	<11500
p-Dimethylaminoazobenzene	R	R	<2240	<150	<240	<1130	<2200	<2270	<11500
p-Nitrotoluene	R	R	<3370	<100	<360	<1690	<3300	3500	<17200
Metals (µg/kg)									
Antimony	<466 J	<482 J	<449 J	NA	<480 J	<450 J	<439 J	<455 J	<458 J
Cadmium	650	655	<450	NA	<480	867	632	974	<460
Chromium	16453	11899	8772	NA	10375	16391	14612	47510	12363
Lead	16541	14048	13370	NA	16485	10622	15930	8015	13559
Nickel	47123J	101205J	57224J	NA	94644J	473845J	289071J	4148256J	19948J
Miscellaneous (µg/kg)									
Percent Moisture	14.1%	17.0%	10.9%	13.7%	16.7%	11.2%	8.96%	12.0%	12.7%
Total Organic Carbon	NA								
BTU from ECD	NA								
Ignitability (Flash Point) for S	NA								
Percent Ash	NA								

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, Additional inform

U=Nondetect at reported limit

<N=Nondetect at reported limit

FILE 4.4-1
S...
ical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB10-0001	SM007-TB10-0305	SM007-TB10-1217	SM007-TB12-0001	SM007-TB12-0305	SM007-TB12-2527	SM007-TB13-0001	SM007-TB13-0305	SM007-TB13-1719
SAMPLE DEPTH (ft)	0.00-1.00	3.00-5.00	12.00-17.00	0.00-1.00	3.00-5.00	25.00-27.00	0.00-1.00	3.00-5.00	17.00-19.00
SAMPLE LOCATION	TB10	TB10	TB10	TB12	TB12	TB12	TB13	TB13	TB13
SAMPLE DATE	6/23/1997	6/23/1997	6/23/1997	11/10/1999	11/10/1999	11/10/1999	11/11/1999	11/11/1999	11/11/1999
PARAMETER									
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	< 267	< 274	< 289	<23	<23	<220	<24	<24	<24
1,1,1-Trichloroethane	< 139	< 143	< 150	<46	<46	<430	<48	<48	<48
1,1,2,2-Tetrachloroethane	< 139	< 143	< 150	<46	<46	<430	<48	<48	<48
1,1,2-Trichloroethane	< 267	< 274	< 289	<35	<35	<320	<35	<36	<36
1,1-Dichloroethane	< 139	< 143	< 150	<46	<46	<430	<48	<48	<48
1,1-Dichloroethene	< 267	< 274	< 289	<35	<35	<320	<36	<36	<36
1,1-Dichloropropene	< 139	< 143	< 150	<23	<23	<220	<24	<24	<24
1,2,3-Trichlorobenzene	< 139	< 143	< 150	<23	<23	<220	<24	<24	<24
1,2,3-Trichloropropane	< 139	< 143	< 150	<58	<58	<540	<60	<61	<60
1,2,4-Trichlorobenzene	< 139	< 143	< 150	<35	<35	<320	<36	<36	<36
1,2,4-Trimethylbenzene	< 139	< 143	< 150	<23	<23	<220	<24	<24	<24
1,2-Dibromo-3-chloropropane	< 267	< 274	< 289	<100	<100	<970	<110	<110	<110
1,2-Dibromoethane	< 139	< 143	< 150	<46	<46	<430	<48	<48	<48
1,2-Dichlorobenzene	555 J	296 J	19600	65	<23	15000	110	<24	<24
1,2-Dichloroethane	< 267	< 274	< 289	<12	<12	<110	<12	<12	<12
1,2-Dichloropropane	< 406	< 417	< 439	<35	<35	<320	<36	<36	<36
1,3,5-Trimethylbenzene	< 139	< 143	< 150	<23	<23	<220	<24	<24	<24
1,3-Dichlorobenzene	< 267	< 274	< 289	<35	<35	<320	<36	<36	<36
1,3-Dichloropropane	< 139	< 143	< 150	<46	<46	<430	<48	<48	<48
1,4-Dichlorobenzene	< 267	< 274	1500	<23	<46	520	<24	<24	<24
2,2-Dichloropropane	< 139	< 143	< 150	<58	<58	<540	<60	<61	<60
2-Butanone	< 939	< 966	< 1020	NA	NA	NA	NA	NA	NA
2-Chloroethyl Vinyl Ether	< 267	< 274	< 289	<58	<58	<540	<60	<61	<60
2-Chlorotoluene	< 139	< 143	< 150	<23	<23	<220	<24	<24	<24
2-Hexanone	< 406	< 417	< 439	<58	<58	<540	<60	<61	<60
4-Chlorotoluene	< 139	< 143	< 150	<35	>35	<320	<36	<36	<36
4-Methyl-2-pentanone	< 406	< 417	< 439	<58	<58	<540	<60	<61	<60
Acetone	< 939	< 966	< 1020	<360	<360	<3300	<370	<380	<370
Acrolein	< 2670	< 2740	< 2890	<69	<69	<650	<72	<73	<72
Acrylonitrile	< 1390	< 1430	< 1500	<58	<58	<540	<60	<61	<60
Allyl Chloride	< 139	< 143	< 150	NA	NA	NA	NA	NA	NA
Benzene	224 J	< 143 J	497 J	<23	<23	<220	<24	<24	<24
Bromobenzene	< 139	< 143	< 150	<35	<35	<320	<36	<36	<36
Bromochloromethane	< 139	< 143	< 150	<35	<35	<320	<36	<36	<36
Bromodichloromethane	< 267	< 274	< 289	<23	<23	<220	<24	<24	<24
Bromoform	< 139	< 143	< 150	<58	<58	<540	<60	<61	<60
Bromomethane	< 406	< 417	< 439	<35	<35	<320	<36	<36	<36
Carbon Disulfide	< 406	< 417	< 439	<12	<12	<110	<12	<12	<12
Carbon Tetrachloride	< 139	< 143	< 150	<35	<35	<320	<36	<36	<36
Chlorobenzene	139 J	< 143	27700	72	<240	1100	2900	100	110
Chloroethane	< 406	< 417	< 439	<100	<100	<970	<110	<110	<110
Chloroform	< 139	< 143	< 150	<35	<35	<320	<36	<36	<36
Chloromethane	< 267	< 274	< 289	<23	<23	<220	<24	<24	<24
Dibromochloromethane	< 139	< 143	< 150	<58	<58	<540	<60	<61	<60
Dibromomethane	< 139	< 143	< 150	<58	<58	<540	<60	<61	<60
Dichlorodifluoromethane	< 267	< 274	< 289	<58	<58	<540	<60	<61	<60
Ethyl Methacrylate	< 139	< 143	< 150	<35	<35	<320	<36	<36	<36
Ethylbenzene	< 139	< 143	< 150	<12	<12	<110	<12	<12	<12
Freon 113	< 267	< 274	< 289	NA	NA	NA	NA	NA	NA
Freon 141b	< 139	< 143	< 150	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	< 267	< 274	< 289	<58	<58	<540	<60	<61	<60
Isopropylbenzene	< 406	< 417	< 439	<12	<12	<110	<12	<12	<12
Methyl Iodide	< 406	< 417	< 439	<23	<23	<220	<24	<24	<24
Methylene Chloride	< 267	< 274	< 289	<23	<23	<220	<24	<24	<24

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB10-0001	SM007-TB10-0305	SM007-TB10-1217	SM007-TB12-0001	SM007-TB12-0305	SM007-TB12-2527	SM007-TB13-0001	SM007-TB13-0305	SM007-TB13-1719
SAMPLE LOCATION	0.00-1.00 TB10	3.00-5.00 TB10	12.00-17.00 TB10	0.00-1.00 TB12	3.00-5.00 TB12	25.00-27.00 TB12	0.00-1.00 TB13	3.00-5.00 TB13	17.00-19.00 TB13
SAMPLE DATE	6/23/1997	6/23/1997	6/23/1997	11/10/1999	11/10/1999	11/10/1999	11/11/1999	11/11/1999	11/11/1999
PARAMETER									
Naphthalene	<139	<143	<150	<12	<12	<110	<12	<12	<12
Styrene	<139	<143	<150	<35	<35	<320	<36	<36	<36
Tetrachloroethene	<139	<143	<150	<290	<290	<2700	<300	<300	<300
Toluene	<139 J	<143 J	277 J	<23	<23	<220	<24	<24	<24
Trichloroethene	<139	<143	<150	<46	<46	<430	<48	<48	300
Trichlorofluoromethane	<267	<274	<289	<58	<58	<540	<60	<61	<60
Vinyl Acetate	<406	<417	<439	<28	<280	<2600	<29	<290	<290
Vinyl Chloride	<267	<274	<289	<35	<35	<320	<36	<36	<36
cis-1,2-Dichloroethene	<267	<274	<289	<23	<23	<220	<24	<24	270
cis-1,3-Dichloropropene	<139	<143	<150	<35	<35	<320	<36	<36	<360
m+p-Xylene	<139	<143	300 J	<35	<35	<320	<36	<36	<36
n-Butylbenzene	<139	<143	<150	<23	<23	<220	<24	<24	<24
n-Propylbenzene	<139	<143	<150	<23	<23	<220	<24	<24	<24
o-Xylene	<139	<143	<150	<35	<35	<320	<36	<36	<36
p-Isopropyltoluene	<139	<143	1390	<23	<23	<220	<24	<24	<24
sec-Butylbenzene	<139	<143	<150	<12	<12	<110	<12	<12	<12
tert-Butylbenzene	<139	<143	<150	<23	<23	<220	<24	<24	<24
trans-1,2-Dichloroethene	<267	<274	<289	<35	<35	<320	<36	<36	<36
trans-1,3-Dichloropropene	<139	<143	<150	<35	<35	<320	<36	<36	<36
trans-1,4-Dichloro-2-butene	<1390	<1430	<1500	<46	<46	<430	<48	<48	<48
Semivolatiles ($\mu\text{g}/\text{kg}$)									
1,2,3-Trichlorobenzene	<2560	<2630	<2770	<120	<120	<110	<120	<120	<120
1,2,4,5-Tetrachlorobenzene	<2560	<2630	<2770	<130	<130	<120	<130	<130	<130
1,2,4-Trichlorobenzene	<2130	<2190	<2310	<120	<120	<110	<120	<120	<120
1,2-Dichlorobenzene	6230	<2190	15700	680	1300	13000	<110	<110	<110
1,3-Dichlorobenzene	<2130	<2190	<2310	<92	<92	<86	<95	<970	<960
1,4-Dichlorobenzene	<2130	<2190	<2310	<100	<100	370	<110	<1100	<110
1-Chloronaphthalene	<5340	<5490	<5770	<100	<100	<970	<110	<1100	<110
1-Methylnaphthalene	<2130	<2190	<2310	<120	<120	<110	<120	<1200	<120
1-Naphthylamine	<7260	<7460	<7850	<890	<890	<830	<920	<9300	<920
2,3,4,6-Tetrachlorophenol	<4270	<4390	<4620	<92	<92	<86	<95	<970	<96
2,3-Dichloroaniline	<2130	<2190	<2310	<120	<120	<110	<120	<1200	<120
2,4,5-Trichlorophenol	<2130	<2190	<2310	<92	<92	<86	<95	<970	<960
2,4,6-Trichlorophenol	<2130	<2190	<2310	<120	<120	<110	<120	<1200	<120
2,4-Dichlorophenol	<2130	<2190	<2310	<130	<130	<120	<130	<1300	<130
2,4-Dimethylphenol	<2130	<2190	<2310	<130	<130	<120	<130	<1300	<130
2,4-Dinitrophenol	<13200	<13600	<14300	<810	<81	<760	<840	<8500	<840
2,4-Dinitrotoluene	<2130	<2190	<2310	300	550	<97	<110	2200	<110
2,4-Toluenediamine	69600	<11000	<11600	<3500	<3500	<3300	<3600	150000J	<3600
2,6-Dichlorophenol	<2130	<2190	<2310	<130	<130	<120	<130	<1300	<130
2,6-Dinitrotoluene	301000	<2190	<2310	<130	130	<120	<130	<1300	<130
2-Chloronaphthalene	<2130	<2190	<2310	<130	<130	<120	<130	<1300	<130
2-Chlorophenol	<2130	<2190	<2310	<100	<100	<97	<110	<1100	<110
2-Methylnaphthalene	<2130	<2190	<2310	<120	<120	<110	<120	<1200	<120
2-Naphthylamine	<8110	<8340	<8780	<710	<720	<670	<740	<7500	<740
2-Nitroaniline	<2560	<2630	<2770	<120	<120	<110	<120	<1200	<120
2-Nitrodiphenylamine	<2130	<2190	<2310	<92	<92	<86	<95	<970	<96
2-Nitrophenol	<2130	<2190	<2310	<100	<100	<97	<110	<1100	<110
2-Picoline	<7900	<8120	<8540	<100	<100	<97	<110	<1100	<110
3,3'-Dichlorobenzidine	<13000	<13400	<14100	<280	<280	<260	<290	<2900	<290
3-Methylcholanthrene	<2130	<2190	<2310	<130	<130	<120	<130	<1300	<130
3-Nitroaniline	<2130	<2190	<2310	<69	<69	<65	<72	<730	<72
4,4'-Methylenedianiline	74300	<19300	<20300	<1500	<1500	<1400	<1500	<15000	<1500
4,6-Dinitro-o-cresol	<2130	<2190	<2310	<390	<390	<370	<410	<4100	<410

TABLE 4.4-1
Statistical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB10-0001	SM007-TB10-0305	SM007-TB10-1217	SM007-TB12-0001	SM007-TB12-0305	SM007-TB12-2527	SM007-TB13-0001	SM007-TB13-0305	SM007-TB13-1719
SAMPLE DEPTH(0)	0.00-1.00	3.00-5.00	12.00-17.00	0.00-1.00	3.00-5.00	25.00-27.00	0.00-1.00	3.00-5.00	17.00-19.00
SAMPLE LOCATION	TB10	TB10	TB10	TB12	TB12	TB12	TB13	TB13	TB13
SAMPLE DATE	6/23/1997	6/23/1997	6/23/1997	11/10/1999	11/10/1999	11/10/1999	11/11/1999	11/11/1999	11/11/1999
PARAMETER									
4-Aminobiphenyl	<2130	<2190	<2310	<560	<570	<53	<580	<5900	<590
4-Aminodiphenylamine	<5340	<5490	<5770	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	<2130	<2190	<2310	<130	<130	<120	<130	<1300	<130
4-Chloro-m-cresol	<2130	<2190	<2310	<150	<150	<140	<160	<1600	<160
4-Chlorophenylphenyl ether	<2130	<2190	<2310	<120	<120	<110	<120	<1200	<120
4-Nitroaniline	<2130	<2190	<2310	<92	<92	<86	<95	<970	<96
4-Nitrophenol	<2130 J	<2190 J	<2310 J	<360	<360	<330	<37	<3800	<370
5-Nitro-o-toluidine	4670	<2190	<2310	<100	<100	<97	<110	<1100	<110
7,12-dimethylbenz[a]anthracene	<2130	<2190	<2310	<160	<160	<150	<170	<1700	<170
Acenaphthene	<2130	<2190	<2310	<130	<130	<120	<130	<1300	<130
Acenaphthylene	<2130	<2190	<2310	<130	<130	<120	<130	<1300	<130
Acetophenone	<2770	<2850	<3000	<100	<100	<97	<110	<1100	<110
Aniline	7170	<3070	<3230	<510	<510	<470	<520	<5300	<530
Anthracene	<2130	<2190	<2310	<100	<100	<97	<110	<1100	<110
Azobenzene	<2560	<2630	<2770	<130	<130	<120	<130	<1300	<130
Benzidine	<34200	<35100	<37000	<1500	<1500	<1400	<1500	<15000	<1500
Benz(a)anthracene	<2770	<2850	<3000	<130	<130	<120	<130	<1300	<130
Benz(a)pyrene	<2130	<2190	<2310	<130	<130	<120	<130	4700	<130
Benz(b)fluoranthene	<2130	<2190	<2310	<100	<100	<97	<110	<1100	<110
Benz(ghi)perylene	<2350	<2410	<2540	<210	<210	<190	<210	<2200	<220
Benz(k)fluoranthene	<2130	<2190	<2310	<140	<140	<130	<140	17000	<140
Benzoic Acid	<2130	<2190	<2310	<1300	<1300	<1200	<1300	<13000	<1300
Benzyl Alcohol	<2130	<2190	<2310	<100	<100	<97	<110	<1100	<110
Benzyl butyl phthalate	<2130	<2190	<2310	<120	<120	<110	<120	<1200	<120
Bis(2-chlorothoxymethane)	<2130	<2190	<2310	<120	<120	<110	<120	<1200	<120
Bis(2-chloroethyl)ether	<2130	<2190	<2310	<100	<100	<97	<110	<1100	<110
Bis(2-chloroisopropyl)ether	<2130	<2190	<2310	<100	<100	<97	<110	<1100	<110
Bis(2-ethylhexyl) phthalate	<2560	<2630	<2770	400	<130	<120	<130	<1300	<130
Bisphenol A	114000	<3950	25200	660	2000	<160	<180	<1800	<180
Carbazole	<10700	<11000	<11600	<81	<81	<76	<84	<850	<84
Chrysene	<2130	<2190	<2310	<130	<130	<120	<130	<1300	<130
Cyclohexanone	<2130	<2190	<2310	<58	<58	<54	<60	<610	<60
Di-n-butyl phthalate	<2130	<2190	<2310	<100	<100	200B	220	<1100	110UB
Di-n-octyl phthalate	<2130	<2190	<2310	<140	<140	<130	<140	<1500	<140
Dibenzo(a,h)anthracene	<2130	<2190	<2310	<150	<150	<140	<160	<1600	<160
Dibenzofuran	<2130	<2190	<2310	<100	<100	<97	<110	<1100	<110
Diethyl Phthalate	<2130	<2190	<2310	130	130	150	<110	<1100	<110
Dimethylphthalate	<2130	<2190	<2310	<100	<100	<97	<110	<1100	<110
Ethyl Methane Sulfonate	<3840	<3950	<4160	<92	<92	<86	<95	<970	<96
Fluoranthene	<2130	<2190	<2310	<120	<120	<110	<120	<1200	<120
Fluorene	<2130 J	<2190 J	<2310 J	150	<130	<120	<130	<1300	<130
Heptachlor	<2350	<2410	<2540	<92	<92	<86	<95	<970	<96
Hexachlorobenzene	<2130	<2190	<2310	<160	<160	<150	<170	<1700	<170
Hexachlorobutadiene	<2130	<2190	<2310	<100	<100	<97	<110	<1100	<110
Hexachlorocyclopentadiene	<2130	<2190	<2310	<1600	<1600	<1500	<1600	<16000	<1600
Hexachloroethane	<2130	<2190	<2310	<100	<100	<97	<110	<1100	<110
Indeno(1,2,3-cd)pyrene	<2130	<2190	<2310	<160	<160	<150	<170	<1700	<170
Isophorone	<2130	<2190	<2310	<140	<140	<130	<140	<1500	<140
Methyl methane sulfonate	<2130	<2190	<2310	<120	<120	<110	<120	<1200	<120
N-Nitrosodibutylamine	<2130	<2190	<2310	<140	<140	<130	<140	<1500	<140
N-Nitrosodimethylamine	<2130 J	<2190 J	<2310 J	<100	<100	<97	<110	<1100	<110

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB10-0001	SM007-TB10-0305	SM007-TB10-1217	SM007-TB12-0001	SM007-TB12-0305	SM007-TB12-2527	SM007-TB13-0001	SM007-TB13-0305	SM007-TB13-1719
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	12.00-17.00	0.00-1.00	3.00-5.00	25.00-27.00	0.00-1.00	3.00-5.00	17.00-19.00
SAMPLE LOCATION	TB10	TB10	TB10	TB12	TB12	TB12	TB13	TB13	TB13
SAMPLE DATE	6/23/1997	6/23/1997	6/23/1997	11/10/1999	11/10/1999	11/10/1999	11/11/1999	11/11/1999	11/11/1999
PARAMETER									
N-Nitrosodiphenylamine	<270	<2850	<3000	<320	<320	<300	<330	<3400	<340
N-Nitrosodipropylamine	<2130	<2190	<2310	<100	<100	<97	<110	<1100	<110
N-Nitrosopiperidine	<2130	<2190	<2310	<120	<120	<110	<120	<1200	<120
Naphthalene	<2130	<2190	<2310	<120	<120	<110	<120	<1200	<120
Nitrobenzene	<2130	<2190	<2310	130	<100	<97	<110	<1100	<110
Pentachlorobenzene	<3630	<3730	<3930	<130	<130	<120	<130	<1300	<130
Pentachloronitrobenzene	<2130	<2190	<2310	<81	<81	<76	<130	<850	<84
Pentachlorophenol	<2130	<2190	<2310	<290	<290	<270	<300	<3000	<300
Phenacetin	<2130	<2190	<2310	<100	<100	<97	<110	<1100	<110
Phenanthrene	<2130	<2190	<2310	<100	<120	<110	<120	<1200	<120
Phenol	<1280	<1320	<1390	<120	<120	<110	<120	<1200	<120
Pyrene	<2130	<2190	<2310	<130	<130	<120	<130	<1300	<130
Pyridine	<2350	<2410	<2540	<100	<100	<97	<110	<1100	<110
Trimethylphosphate	<2130	<2190	<2310	<100	<100	<97	<110	<1100	<110
Triphenylphosphate	<10700	<11000	<11600	<150	<150	<140	<160	<1600	<160
m,p-Cresol	<3200	<3290	<3460	<210	<210	<190	<210	<2200	<220
m-Nitrotoluene	6210	<2190	<2310	<120	<120	<110	<120	<1200	<120
m-Toluidine	<4270	<4390	<4620	<92	<92	<110	<95	<970	<96
o,p-Toluidine	<10900	<11200	<11800	<81	<81	<76	<84	<85	<84
o-Cresol	<2130	<2190	<2310	<92	<92	120	<95	<970	<96
o-Nitrotoluene	78100	<2190	<2310	<130	<130	<120	<130	<1300	<130
p-Chloroaniline	<2130	<2190	<2310	820	1500	<86	130	19000	<96
p-Dimethylaminoazobenzene	<2130	<2190	<2310	<150	<150	<140	<160	<1600	<160
p-Nitrotoluene	3290	<3290	<3460	<100	<130	<97	<110	<1100	<110
Metals (µg/kg)									
Antimony	<427 J	<439 J	<462 J	<2.30	<2.31	<2.16	2.63	3.16	<2.40
Cadmium	<430	<440	<460	<0.576	0.669	<0.539	<0.5973	<0.606	<0.600
Chromium	14764	14448	12032	4.53	5.96	5.56	6.72	6.59	7.14
Lead	2923	7153	20487	17	18	9.5	17.8	18.1	13.4
Nickel	325779J	142742J	43999J	15.1	13.4	8.19	16.8	73.2	7.61
Miscellaneous (µg/kg)									
Percent Moisture	6.29%	8.88%	13.4%	NA	NA	NA	NA	NA	NA
Total Organic Carbon	NA								
BTU from ECD	NA								
Ignitability (Flash Point) for S	NA								
Percent Ash	NA								

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, Additional inform

U=Nondetect at reported limit

<Nondetect at reported limit

LE 4.4-1
Scientific Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB14-0001	SM007-TB14-0305	SM0007-TB14-1012	SM0007-TB15-0001	SM0007-TB15-0305	SM0007-TB15-1315	SM0007-TB15-1315D	SM0007-TB15-1719	SM008-TB01-0001
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	10.00-12.00	0.00-1.00	3.00-5.00	13.00-15.00	13.00-15.00	17.00-19.00	0.00-1.00
SAMPLE LOCATION	TB14	TB14	TB14	TB15	TB15	TB15	TB15	TB15	TB01
SAMPLE DATE	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	6/23/1997
PARAMETER									
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	<25	<25	<480	<22	<25	<25	<25	<24	<261
1,1,1-Trichloroethane	<50	<50	<960	<44	<50	<51	<50	<49	<136
1,1,2,2-Tetrachloroethane	<50	<50	<960	<44	<50	<51	<50	<49	<136
1,1,2-Trichloroethane	<38	<37	<720	<33	<37	<38	<37	<36	<261
1,1-Dichloroethane	<50	<50	<960	<44	<50	<51	<50	<49	<136
1,1-Dichloroethene	<38	<37	<720	<33	<37	<38	<37	<36	<261
1,1-Dichloropropene	<25	<25	<480	<22	<25	<25	<25	<24	<136
1,2,3-Trichlorobenzene	<25	<25	<480	<22	<25	<25	<25	<24	<136
1,2,3-Trichloropropane	<63	<62	<1200	<55	<62	<64	<62	<61	<136
1,2,4-Trichlorobenzene	<38	<37	<720	<33	<37	<38	<37	<36	177 J
1,2,4-Trimethylbenzene	<25	<25	<480	<22	<25	<25	<25	<24	<136
1,2-Dibromo-3-chloropropane	<110	<110	<2200	<99	<110	<110	<110	<110	<261
1,2-Dibromoethane	<50	<50	<960	<44	<50	<51	<50	<49	<136
1,2-Dichlorobenzene	<25	<25	2000	<22	<25	110	200	160	3020
1,2-Dichloroethane	<13	<12	<240	<11	<12	<13	<12	<12	<261
1,2-Dichloropropane	<38	<37	<720	<33	<37	<38	<37	<36	<396
1,3,5-Trimethylbenzene	<25	<25	<480	<22	<25	<25	<25	<24	<136
1,3-Dichlorobenzene	<38	<37	<72	<33	<37	<38	<37	<36	<261
1,3-Dichloropropane	<50	<50	<96	<44	<50	<51	<50	<49	<136
1,4-Dichlorobenzene	<25	<25	3400	<22	<25	380	770	170	334 J
2,2-Dichloropropane	<63	<62	<1200	<55	<62	<64	<62	<61	<136
2-Butanone	NA	NA	NA	NA	NA	<150	<150	NA	<918
2-Chloroethyl Vinyl Ether	<63	<62	<1200	<55	<62	<64	<62	<61	<261
2-Chlorotoluene	<25	<25	<480	<22	<25	<25	<25	<24	<136
2-Hexanone	<63	<62	<1200	<55	<62	<64	<62	<61	<396
4-Chlorotoluene	<38	<37	<720	<33	<37	<38	<37	<36	<136
4-Methyl-2-pentanone	NA	NA	NA	NA	NA	<64	<62	NA	<396
Acetone	<390	<39	<7500	<340	<380	<390	420B	<380	<918
Acrolein	<750	<75	<1400	<66	<74	<76	<75	<73	<2610
Acrylonitrile	<63	<62	<1200	<55	<62	<64	<62	<61	<1360
Allyl Chloride	NA	NA	NA	NA	NA	NA	NA	NA	<136
Benzene	<25	<25	<480	<22	<25	<25	<25	<24	1880 J
Bromobenzene	<38	<37	<720	<33	<37	<38	<37	<36	<136
Bromochloromethane	<38	<37	<720	<33	<37	<38	<37	<36	<136
Bromodichloromethane	<25	<25	<480	<22	<25	<25	<25	<24	<261
Bromoform	<63	<62	<1200	<55	<62	<64	<62	<61	<136
Bromomethane	<38	<37	<72	<33	<37	<38	<37	<36	<396
Carbon Disulfide	<13	<12	<240	<11	<12	<13	<12	<12	<396
Carbon Tetrachloride	<38	<37	<720	<33	<37	<38	<37	<36	<136
Chlorobenzene	<13	330	9300	<11	<12	7300	15000	4300	68800
Chloroethane	<11	<110	<2200	<99	<110	<110	<110	<110	<396
Chloroform	<38	<37	<720	<33	<37	<38	<37	<36	<136
Chloromethane	<25	<25	<480	<22	<25	<25	<25	<24	<261
Dibromochloromethane	<63	<62	<1200	<55	<62	<64	<62	<61	<136
Dibromomethane	<63	<62	<1200	<55	<62	<64	<62	<61	<136
Dichlorodifluoromethane	<63	<62	<1200	<55	<62	<64	<62	<61	<261
Ethyl Methacrylate	<38	<37	<720	<33	<37	<38	<37	<36	<136
Ethylbenzene	<13	<12	<240	<11	<12	<13	<12	<12	<136
Freon 113	NA	NA	NA	NA	NA	NA	NA	NA	<261
Freon 141b	NA	NA	NA	NA	NA	NA	NA	NA	<136
Hexachlorobutadiene	<63	<62	<1200	<55	<62	<64	<75	<61	<261
Isopropylbenzene	<13	<12	<240	<11	<12	<13	<12	<12	<396
Methyl Iodide	NA	NA	NA	NA	NA	<25	<25	NA	<396
Methylene Chloride	<25	<25	<480	<22	<25	<25	<25	<24	<261

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB14-0001	SM007-TB14-0305	SM0007-TB14-1012	SM0007-TB15-0001	SM0007-TB15-0305	SM0007-TB15-1315	SM0007-TB15-1315D	SM0007-TB15-1719	SM008-TB01-0001
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	10.00-12.00	0.00-1.00	3.00-5.00	13.00-15.00	13.00-15.00	17.00-19.00	0.00-1.00
SAMPLE LOCATION	TB14	TB14	TB14	TB15	TB15	TB15	TB15	TB15	TB01
PARAMETER									
Naphthalene	<13	<12	<240	<11	<12	<13	<12	<12	<136
Styrene	<38	<37	<720	<33	<37	<38	<37	<36	<136
Tetrachloroethene	<30	<10	<6000	<28	<30	<32	<30	<300	<136
Toluene	<25	<25	<480	<22	<25	<25	<25	<24	699 J
Trichloroethene	<50	<50	<960	<44	<50	<51	<50	<49	<136
Trichlorofluoromethane	<63	<62	<1200	<55	<62	<64	<62	<61	<261
Vinyl Acetate	<300	<300	<5800	<260	<300	<310	<300	<290	<396
Vinyl Chloride	<38	<37	<720	<33	<37	<38	<37	<36	<261
cis-1,2-Dichloroethene	<25	<25	<480	<22	<25	<25	<25	<24	<261
cis-1,3-Dichloropropene	<38	<37	<720	<33	<37	<38	<37	<36	<136
m+p-Xylene	<38	<37	<720	<33	<37	<38	<37	<36	<136
n-Butylbenzene	<25	<25	<480	<22	<25	<25	<25	<24	<136
n-Propylbenzene	<25	<25	<480	<22	<25	<25	<25	<24	<136
o-Xylene	<38	<37	<720	<33	<37	<38	<37	<36	<136
p-Isopropyltoluene	<25	<25	<480	<22	<25	<25	<25	<24	<136
sec-Butylbenzene	<13	<12	<40	<11	<12	<13	<12	<12	<136
tert-Butylbenzene	<25	<25	<480	<22	<25	<25	<25	<24	<136
trans-1,2-Dichloroethene	<38	<37	<720	<33	<37	<38	<37	<36	<261
trans-1,3-Dichloropropene	<38	<37	<720	<33	<37	<38	<37	<36	<136
trans-1,4-Dichloro-2-butene	<50	<50	<960	<44	<50	<51	<50	<49	<1360
Semivolatiles (µg/kg)									
1,2,3-Trichlorobenzene	<130	<120	<1200	<110	<120	<130	<120	<120	<2500
1,2,4,5-Tetrachlorobenzene	<140	<140	<1300	<120	<140	<140	<140	<130	<2500
1,2,4-Trichlorobenzene	<130	<120	<1200	<110	<120	30	<120	<120	<2090
1,2-Dichlorobenzene	<110	<110	4500	<99	<110	720	540	120	<2090
1,3-Dichlorobenzene	<100	<100	<960	<88	<99	<100	<100	<97	<2090
1,4-Dichlorobenzene	<110	<110	1200	<99	<110	930	780	170	<2090
1-Chloronaphthalene	<110	<110	<1100	<99	<110	<110	<110	<110	<5210
1-Methylnaphthalene	<130	<120	<1200	<110	250	<130	<120	<120	<2090
1-Naphthylamine	<970	<960	<9300	<850	<950	<980	<960	<940	<7090
2,3,4,6-Tetrachlorophenol	<100	<100	<960	<88	<99	<100	<100	<97	<4170
2,3-Dichloroaniline	<130	<120	200	<110	<120	<130	<120	<120	<2090
2,4,5-Trichlorophenol	<100	<100	<960	<88	<99	<100	<100	<97	<2090
2,4,6-Trichlorophenol	<130	<120	<1200	<110	<120	<130	<120	<120	<2090
2,4-Dichlorophenol	<140	<140	<1300	<120	<140	<140	<140	<130	<2090
2,4-Dimethylphenol	<140	<140	<1300	<120	<140	<140	<140	<130	<2090
2,4-Dinitrophenol	<880	<870	<8400	<770	<870	<890	<870	<850	<12900
2,4-Dinitrotoluene	<110	<110	<1100	<99	<110	<110	<110	<110	<2090
2,4-Toluenediamine	<3800	1300UJ	57000UJ	<3400	<3800	<3900	<3800	<3700	<10400
2,6-Dichlorophenol	<140	<140	<1300	<120	<140	<140	<140	<130	<2090
2,6-Dinitrotoluene	<140	<140	<1300	<120	<140	<140	<140	<130	<2090
2-Chloronaphthalene	<140	<140	<1300	<99	<140	<140	<140	<130	<2090
2-Chlorophenol	<110	<110	<1100	<110	<110	120	120	130	<2090
2-Methylnaphthalene	<130	<120	<1200	<680	310	130	<120	<120	<2090
2-Naphthylamine	<780	<770	<7500	<110	<770	<790	<770	<750	<7920
2-Nitroaniline	<130	<120	<1200	<88	<120	<130	<120	<120	<2500
2-Nitrodiphenylamine	<100	<100	<960	<99	<99	<100	<100	<97	<2090
2-Nitrophenol	<110	<110	<1100	<99	<110	<110	<110	<110	<2090
2-Picoline	<110	<110	<1100	<99	<110	<110	<110	<110	<7720
3,3'-Dichlorobenzidine	<300	<300	<2900	<260	<300	<310	<300	<290	<12700
3-Methylcholanthrene	<140	<140	<1300	<120	<140	<140	<140	<130	<2090
3-Nitroaniline	<75	<75	<720	<66	<74	<76	<75	<73	<2090
4,4' Methyleneedianiline	<160	<1600	<15000	<1400	<1600	<1600	<1600	<1500	<18400
4,6-Dinitro-o-cresol	<430	<420	<4100	<370	<420	<430	<420	<410	<2090

TABLE 4.4-1
Statistical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

PARAMETER	SAMPLE ID	SM007-TB14-0001	SM007-TB14-0305	SM0007-TB14-1012	SM0007-TB15-0001	SM0007-TB15-0305	SM0007-TB15-1315	SM0007-TB15-1315D	SM0007-TB15-1719	SM008-TB01-0001
	SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	10.00-12.00	0.00-1.00	3.00-5.00	13.00-15.00	13.00-15.00	17.00-19.00	0.00-1.00
SAMPLE LOCATION	TB14	TB14	TB14	TB14	TB15	TB15	TB15	TB15	TB01	
SAMPLE DATE	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	6/23/1997
4-Aminobiphenyl	<620	<610	<5900	<540	<610	<620	<610	<600	<2090	
4-Aminodiphenylamine	NA	NA	NA	NA	NA	NA	NA	NA	<5210	
4-Bromophenyl phenyl ether	<140	<140	<1300	<120	<140	<140	<140	<130	<2090	
4-Chloro-m-cresol	<160	<160	<1600	<140	<160	<170	<160	<160	<2090	
4-Chlorophenylphenyl ether	<130	<120	<1200	<110	<120	<130	<120	<120	<2090	
4-Nitroaniline	<100	<100	<960	<88	<99	<100	<100	<97	<2090	
4-Nitrophenol	<390	<390	<3700	<340	<380	<390	<390	<38	<2090	
5-Nitro-o-toluidine	<110	<110	<1100	<99	<110	<110	<110	<110	<2090	
7,12-dimethylbenz[a]anthracene	<180	<170	<1700	<150	<170	<180	<170	<170	<2090	
Acenaphthene	<140	<140	<1300	<120	<140	<140	<140	<130	<2090	
Acenaphthylene	<140	<140	<1300	<120	<140	<140	<140	<130	<2090	
Acetophenone	<110	<110	<1100	<99	<110	<110	<110	<110	<2710	
Aniline	<550	<550	<5300	<49	<540	<560	<550	<540	<2920	
Anthracene	<110	<110	<1100	<99	<110	<110	<110	<110	<2090	
Azobenzene	<140	<140	<1300	<120	<140	<140	<140	<130	<2500	
Benzidine	<1600	<1600	<15000	<1400	<1600	<1600	<1600	<1500	<33400	
Benzo(a)anthracene	<140	<140	<1300	<120	<140	<140	<140	<130	<2710	
Benzo(a)pyrene	<140	<140	<1300	<120	<140	<140	<140	<130	<2090	
Benzo(b)fluoranthene	<110	<110	<1100	<99	<110	<110	<110	<110	<2090	
Benzo(ghi)perylene	<230	<220	<2200	<200	<220	<23	<220	<220	<2290	
Benzo(k)fluoranthene	<150	1000	3200	<130	<150	<150	<150	<150	<2090	
Benzoic Acid	<1400	<1400	<13000	<1200	<1400	<1400	<1400	<1300	<2090	
Benzyl Alcohol	<110	<110	<1100	<99	<110	<110	<110	<110	<2090	
Benzyl butyl phthalate	<130	<120	<1200	<110	<120	<130	<120	<120	<2090	
Bis(2-chloroethoxymethane)	<130	<120	<1200	<110	<120	<130	<120	<120	<2090	
Bis(2-chloroethyl)ether	<110	<110	<1100	<99	<110	<110	<110	<110	<2090	
Bis(2-chloroisopropyl)ether	<110	<110	<1100	<99	<110	<110	<110	<110	<2090	
Bis(2-ethylhexyl) phthalate	<140	<140	<1300	<120	<140	<140	<140	<130	<2500	
Bisphenol A	<190	190	<1800	<170	<190	<190	<190	<180	16500	
Carbazole	<88	<87	<840	<77	<87	<89	<87	<85	<10400	
Chrysene	140	<140	<1300	<120	<140	<140	<140	<130	<2090	
Cyclohexanone	<63	<62	<600	<55	<62	<64	<62	<61	<2090	
Di-n-butyl phthalate	140UB	160UB	<1100	<99	130UB	180UB	<110	240UB	<2090	
Di-n-octyl phthalate	<150	<150	<1400	<130	<150	<150	<150	<150	<2090	
Dibenzo(a,h)anthracene	<160	<160	<1600	<140	<160	<170	<160	<160	<2090	
Dibenzofuran	<110	<110	<1100	<99	<110	<110	<110	<110	<2090	
Diethyl Phthalate	<110	<110	3000	290B	<110	340B	260B	250B	<2090	
Dimethylphthalate	<110	<110	<1100	<99	<110	<110	<110	<110	<2090	
EthyI Methane Sulfonate	<100	<100	<9600	<88	<99	<100	<100	<97	<3750	
Fluoranthene	<130	<120	<1200	<110	<120	<130	<120	<120	<2090	
Fluorene	<140	<140	<1300	<120	<140	<140	<140	<130	<2090	
Heptachlor	<100	<100	<960	<88	<99	<100	<100	<97	<2290	
Hexachlorobenzene	<180	<170	<1700	<150	<140	<180	<170	<170	<2090	
Hexachlorobutadiene	<110	<110	<1100	<99	<110	<110	<110	<110	<2090	
Hexachlorocyclopentadiene	<1700	<1700	<1600	<150	<1700	<1700	<1700	<1600	<2090	
Hexachloroethane	<110	<110	<1100	<99	<110	<110	<110	<110	<2090	
Indeno(1,2,3-cd)pyrene	<180	<170	<1700	<150	<170	<180	<170	<170	<2090	
Isophorone	<150	<150	<1400	<130	<150	<150	<150	<150	<2090	
Methyl methane sulfonate	<130	20	<1200	<110	<120	<130	<120	<120	<2090	
N-Nitrosodibutylamine	<150	<150	<1400	<130	<150	<150	<150	<150	<2090	
N-Nitrosodimethylamine	<110	<110	<1100	<990	<110	<110	<110	<110	<2090	

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM007-TB14-0001	SM007-TB14-0305	SM0007-TB14-1012	SM0007-TB15-0001	SM0007-TB15-0305	SM0007-TB15-1315	SM0007-TB15-1315D	SM0007-TB15-1719	SM008-TB01-0001
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	10.00-12.00	0.00-1.00	3.00-5.00	13.00-15.00	13.00-15.00	17.00-19.00	0.00-1.00
SAMPLE LOCATION	TB14	TB14	TB14	TB15	TB15	TB15	TB15	TB15	TB01
SAMPLE DATE	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	11/11/1999	6/23/1997
PARAMETER									
N-Nitrosodiphenylamine	<350	<50	<3400	<10	<350	<360	<350	<340	<2710
N-Nitrosodipropylamine	<110	<110	<1100	<99	<110	<110	<110	<110	<2090
N-Nitrosopiperidine	<130	<120	<1200	<110	<120	<130	<120	20	<2090
Naphthalene	<130	<120	<1200	<110	320	150	<120	<120	<2090
Nitrobenzene	<110	<110	<1100	<99	<110	<110	<110	<110	<2090
Pentachlorobenzene	<140	<140	<1300	<120	<140	<140	<140	<130	<3550
Pentachloronitrobenzene	<88	<87	<840	<77	<87	<89	<87	<85	<2090
Pentachlorophenol	<310	<310	<3000	<280	<310	<320	<310	<30	<2090
Phenacetin	<110	<110	<1100	<99	<110	<110	<110	<110	<2090
Phenanthrene	250	<120	<1200	<110	160	130	<120	<120	<2090
Phenol	30	<120	3000	<110	<120	<130	<120	<120	<1250
Pyrene	<140	<140	<1300	<120	<140	<140	<140	<130	<2090
Pyridine	<110	<110	<1100	<99	<110	<110	<110	<110	<2290
Trimethylphosphate	<110	<110	<1100	<99	<110	<110	<110	<110	<2090
Triphenylphosphate	<160	<160	<1600	<140	<160	<170	<160	<160	<10400
m,p-Cresol	<230	<220	<2200	<200	<220	<230	<220	<220	<3130
m-Nitrotoluene	<130	<120	<1200	<110	<120	<130	<120	<120	<2090
m-Toluidine	<100	<100	<960	<88	<99	<100	<100	<97	<4170
o,p-Toluidine	<88	<87	<840	<77	<87	<89	<87	<85	<10600
o-Cresol	<10	<100	<960	<88	<99	<100	<100	<97	<2090
o-Nitrotoluene	<140	<140	<1300	<120	<140	<140	<140	<130	<2090
p-Chloroaniline	<110	<100	8200	<88	<99	<100	<100	<97	2440
p-Dimethylaminoazobenzene	<160	<160	<1600	<140	<160	<170	<160	<160	<2090
p-Nitrotoluene	<110	<110	<1100	<99	<110	<110	<110	<110	<3130
Metals (µg/kg)									
Antimony	<2.52	<2.49	<2.41	<2.20	<2.48	<2.55	<2.49	<2.49	<417
Cadmium	0.665	<0.623	0.611	<0.551	<0.619	1.31	0.958	0.958	2686
Chromium	6.96	10.0	6.49	9.02	7.5	11.5	9.94	9.94	29741
Lead	11.6	12.1	19	18.9	15.1	36.8	33.2	33.2	18941
Nickel	17.1	22.9	75.1	13.6	15.8	14.9	14.2	14.2	66208
Miscellaneous (µg/kg)									
Percent Moisture	NA	NA	NA	NA	NA	NA	NA	NA	4.10% 8800000 J
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA
BTU from ECD	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ignitability (Flash Point) for S	NA	NA	NA	NA	NA	NA	NA	NA	NA
Percent Ash	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, Additional inform

U=Nondetect at reported limit

<Nondetect at reported limit

BLE 4.4-1
Initial Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

PARAMETER	SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM008-TB01-0305 3.00-5.00 TB01 6/23/1997	SM008-TB01-0709 7.00-9.00 TB01 6/23/1997	SM008-TB01-0709FD 7.00-9.00 TB01 6/23/1997	SM008-TB01-1113 11.00-13.00 TB01 6/23/1997	SM008-TB01-1416 14.00-16.00 TB01 6/23/1997	SM009-TB01-0001 0.00-1.00 TB01 6/24/1997	SM009-TB01-0305 3.00-5.00 TB01 6/24/1997	SM009-TB01-0305FD 3.00-5.00 TB01 6/24/1997	SM009-TB01-1719 17.00-19.00 TB01 6/24/1997
Volatiles (µg/kg)										
1,1,1,2-Tetrachloroethane	< 557	< 1060	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294	< 294
1,1,1-Trichloroethane	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
1,1,2,2-Tetrachloroethane	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
1,1,2-Trichloroethane	< 557	< 1060	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294	< 294
1,1-Dichloroethane	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
1,1-Dichloroethene	< 557	< 1060	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294	< 294
1,1-Dichloropropene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
1,2,3-Trichlorobenzene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
1,2,4-Trichlorobenzene	< 278	< 530	< 528	2050 J	< 2930 J	< 140	< 152	< 152	< 153	< 153
1,2,4-Trimethylbenzene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	516 J	551 J	< 153	< 153
1,2-Dibromo-3-chloropropane	< 557	< 1060	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294	< 294
1,2-Dibromoethane	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
1,2-Dichlorobenzene	17800	414000	338000	2480000	2460000 J	367 J	1410	1520	< 294	< 294
1,2-Dichloroethane	< 557	< 1060	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294	< 294
1,2-Dichloropropane	< 835	< 1590	< 1580	< 4100	< 8800 J	< 410	< 445	< 445	< 448	< 448
1,3,5-Trimethylbenzene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	750	809	< 153	< 153
1,3-Dichlorobenzene	< 557	< 1060	< 1060	3670 J	< 5870 J	< 270	< 293	< 293	< 294	< 294
1,3-Dichloropropane	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
1,4-Dichlorobenzene	31200	35000	26400	129000	129000 J	< 270	< 293	< 293	< 294	< 294
2,2-Dichloropropane	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
2-Butanone	< 2000	< 3710	< 3690	< 9500	< 21100 J	< 949	< 1030	< 1030	< 1040	< 1040
2-Chloroethyl Vinyl Ether	< 557	< 1060	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294	< 294
2-Chlorotoluene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
2-Hexanone	< 835	< 1590	< 1580	< 4100	< 8800 J	< 410	< 445	< 445	< 448	< 448
4-Chlorotoluene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
4-Methyl-2-pentanone	< 835	< 1590	< 1580	< 4100	< 8800 J	< 410	< 445	< 445	< 448	< 448
Acetone	< 2000	< 3710	< 3690	< 9500	< 21100 J	< 949	< 1030	< 1030	< 1040	< 1040
Acrolein	< 5570	< 10600	< 10600	< 27000	< 58700 J	< 2700	< 2930	< 2930	< 2940	< 2940
Acrylonitrile	< 2780	< 5300	< 5280	< 14000	< 29300 J	< 1400	< 1520	< 1520	< 1530	< 1530
Allyl Chloride	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
Benzene	10400 J	19100 J	5700 J	313000	223000 J	< 140 J	328 J	< 152	< 153	< 153
Bromobenzene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
Bromochloromethane	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
Bromodichloromethane	< 557	< 1060	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294	< 294
Bromoform	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
Bromomethane	< 835	< 1590	< 1580	< 4100	< 8800 J	< 410	< 445	< 445	< 448	< 448
Carbon Disulfide	< 835	< 1590	< 1580	< 4100	< 8800 J	< 410	< 445	< 445	< 448	< 448
Carbon Tetrachloride	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
Chlorobenzene	323000	445000	338000	1620000	387000 J	216 J	1110	363 J	< 153	< 153
Chloroethane	< 835	< 1590	< 1580	< 4100	< 8800 J	< 410	< 445	< 445	< 448	< 448
Chloroform	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
Chloromethane	< 557	< 1060	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294	< 294
Dibromochloromethane	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
Dibromomethane	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
Dichlorodifluoromethane	< 557	< 1060	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294	< 294
Ethyl Methacrylate	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
Ethylbenzene	< 278	< 530	< 528	1620 J	< 2930 J	< 140	< 152	< 152	< 153	< 153
Freon 113	< 557	1170 JB	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294	< 294
Freon 141b	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153	< 153
Hexachlorobutadiene	< 557	< 1060	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294	< 294
Isopropylbenzene	< 835	< 1590	< 1580	< 4100	< 8800 J	< 410	< 445	< 445	< 448	< 448
Methyl Iodide	< 835	< 1590	< 1580	< 4100	< 8800 J	< 410	< 445	< 445	< 448	< 448
Methylene Chloride	< 557	< 1060	< 1060	< 1060	4640 J	< 5870 J	< 270	< 293	< 293	< 294

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM008-TB01-0305	SM008-TB01-0709	SM008-TB01-0709FD	SM008-TB01-1113	SM008-TB01-1416	SM009-TB01-0001	SM009-TB01-0305	SM009-TB01-0305FD	SM009-TB01-1719
SAMPLE DEPTH(ft)	3.00-5.00	7.00-9.00	7.00-9.00	11.00-13.00	14.00-16.00	0.00-1.00	3.00-5.00	3.00-5.00	17.00-19.00
SAMPLE LOCATION	TB01	TB01	TB01	TB01	TB01	TB01	TB01	TB01	TB01
PARAMETER									
Naphthalene	< 278	< 530	< 528	2160 J	< 2930 J	< 140	< 152	< 152	< 153
Styrene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153
Tetrachloroethene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153
Toluene	32300 J	276000 J	158000 J	1400000	434000 J	< 140 J	715 J	< 152	< 153
Trichloroethene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153
Trichlorofluoromethane	< 557	< 1060	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294
Vinyl Acetate	< 835	< 1590	< 1580	< 4100	< 8800 J	< 410	< 445	< 445	< 448
Vinyl Chloride	< 557	< 1060	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294
cis-1,2-Dichloroethene	< 557	< 1060	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294
cis-1,3-Dichloropropene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153
m+p-Xylene	< 278	594 J	< 528	3020 J	8690 J	< 140	293 J	< 152	< 153
n-Butylbenzene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153
n-Propylbenzene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153
o-Xylene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153
p-Isopropyltoluene	345 J	1170 J	908 J	2590 J	< 2930 J	< 140	492 J	457 J	< 153
sec-Butylbenzene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	223 J	< 152	< 153
tert-Butylbenzene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	492 J	539 J	< 153
trans-1,2-Dichloroethene	< 557	< 1060	< 1060	< 2700	< 5870 J	< 270	< 293	< 293	< 294
trans-1,3-Dichloropropene	< 278	< 530	< 528	< 1400	< 2930 J	< 140	< 152	< 152	< 153
trans-1,4-Dichlora-2-butene	< 2780	< 5300	< 5280	< 14000	< 29300 J	< 1400	< 1520	< 1520	< 1530
Semivolatiles (µg/kg)									
1,2,3-Trichlorobenzene	< 5350	< 2550 J	< 12700	R	< 28200	< 2590	< 2810	< 2810	< 280
1,2,4,5-Tetrachlorobenzene	< 5350	< 2550 J	< 12700	R	< 28200	< 2590	< 2810	< 2810	< 280
1,2,4-Trichlorobenzene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
1,2-Dichlorobenzene	25500	193000 J	189000	853000 J	2120000	4250	8790	10300	< 240
1,3-Dichlorobenzene	< 4450	< 2120 J	20200	R	< 23500	< 2160	< 2340	< 2340	< 240
1,4-Dichlorobenzene	28400	11700 J	< 10600	46800 J	71100	< 2160	< 2340	< 2340	< 240
1-Chloronaphthalene	< 11100	< 5300 J	< 26400	R	< 58700	< 5390	< 5860	< 5860	< 590
1-Methylnaphthalene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
1-Naphthylamine	< 15100	< 7210 J	< 35900	R	< 79800	< 7330	< 7970	< 7970	< 800
2,3,4,6-Tetrachlorophenol	< 8910	< 4240 J	< 21100	R	< 47000	< 4310	< 4690	< 4690	< 470
2,3-Dichloroaniline	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
2,4,5-Trichlorophenol	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
2,4,6-Trichlorophenol	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
2,4-Dichlorophenol	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
2,4-Dimethylphenol	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
2,4-Dinitrophenol	< 27600	< 13200 J	< 65400	R	< 146000	< 13400	< 14500	< 14500	< 1460
2,4-Dinitrotoluene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
2,4-Toluenediamine	< 22300	< 10600 J	< 52800	R	< 117000	< 10800	< 11700	< 11700	< 1180
2,6-Dichlorophenol	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
2,6-Dinitrotoluene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
2-Chloronaphthalene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
2-Chlorophenol	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
2-Methylnaphthalene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
2-Naphthylamine	< 16900	< 8060 J	< 40100	R	< 89200	< 8200	< 8910	< 8910	< 900
2-Nitroaniline	< 5350	< 2550 J	< 12700	R	< 28200	< 2590	< 2810	< 2810	< 280
2-Nitrodiphenylamine	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
2-Nitrophenol	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
2-Picoline	< 16500	< 7850 J	< 39100	R	< 86900	< 7980	< 8680	< 8680	< 870
3,3'-Dichlorobenzidine	< 27200	< 12900 J	< 64400	R	< 143000	< 13200	< 14300	< 14300	< 1440
3-Methylcholanthrene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
3-Nitroaniline	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
4,4'-Methylenedianiline	< 39200	< 18700 J	< 92900	R	< 207000	< 19000	< 20600	< 20600	< 2070
4,6-Dinitro-o-cresol	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240

TABLE 4.4-1
Statistical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM008-TB01-0305	SM008-TB01-0709	SM008-TB01-0709FD	SM008-TB01-1113	SM008-TB01-1416	SM009-TB01-0001	SM009-TB01-0305	SM009-TB01-0305FD	SM009-TB01-1719
SAMPLE DEPTH(ft)	3.00-5.00	7.00-9.00	7.00-9.00	11.00-13.00	14.00-16.00	0.00-1.00	3.00-5.00	3.00-5.00	17.00-19.00
SAMPLE LOCATION	TB01	TB01	TB01	TB01	TB01	TB01	TB01	TB01	TB01
SAMPLE DATE	6/23/1997	6/23/1997	6/23/1997	6/23/1997	6/23/1997	6/24/1997	6/24/1997	6/24/1997	6/24/1997
PARAMETER									
4-Aminobiphenyl	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
4-Aminodiphenylamine	<1100	<5300 J	<26400	R	<58700	<5390	<5860	<5860	<590
4-Bromophenyl phenyl ether	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
4-Chloro-m-cresol	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
4-Chlorophenylphenyl ether	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
4-Nitroaniline	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
4-Nitrophenol	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
5-Nitro-o-toluidine	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
7,12-dimethylbenz[a]anthracene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Acenaphthene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Acenaphthylene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Acetophenone	<5790	<2760 J	<13700	R	<30500	<2800	<3050	<3050	<310
Aniline	12900	<2970 J	<14800	73900 J	657000	<3020	<3280	<3280	<330
Anthracene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Azobenzene	<5350	<2550 J	<12700	R	<28200	<2590	<2810	<2810	<280
Benzidine	<71300	R	<169000	R	<376000	<34500	<37500	<37500	<3770
Benz(a)anthracene	<5790	<2760 J	<13700	R	<30500	<2800	<3050	<3050	<310
Benz(a)pyrene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Benz(b)fluoranthene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Benz(ghi)perylene	<4900	<2330 J	<11600	R	<25800	<2370	<2580	<2580	<260
Benz(k)fluoranthene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Benzoic Acid	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Benzyl Alcohol	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Benzyl butyl phthalate	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Bis(2-chloroethoxymethane)	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Bis(2-chloroethyl)ether	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Bis(2-chloroisopropyl)ether	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Bis(2-ethylhexyl) phthalate	<5350	<2550 J	<12700	R	<28200	<2590	<2810	<2810	340 B
Bisphenol A	171000	150000 J	24900	756000 J	479000	<3880 J	9310 J	<4220 J	<420 J
Carbazole	<22300	<10600 J	<52800	R	<117000	<10800	<11700	<11700	<1180
Chrysene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Cyclohexanone	<4450	14700 J	<10600	R	208000	<2160	<2340	<2340	<240
Di-n-butyl phthalate	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	450 B
Di-n-octyl phthalate	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Dibenz(a,h)anthracene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Dibenzofuran	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Diethyl Phthalate	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Dimethylphthalate	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Ethyl Methane Sulfonate	<8020	<3820 J	<19000	R	<42300	<3880	<4220	<4220	<420
Fluoranthene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Fluorene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Heptachlor	<4900	<2330 J	<11600	R	<25800	<2370	<2580	<2580	<260
Hexachlorobenzene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Hexachlorobutadiene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Hexachlorocyclopentadiene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Hexachloroethane	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Indeno(1,2,3-cd)pyrene	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Isophorone	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
Methyl methane sulfonate	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
N-Nitrosodibutylamine	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240
N-Nitrosodimethylamine	<4450	<2120 J	<10600	R	<23500	<2160	<2340	<2340	<240

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM008-TB01-0305	SM008-TB01-0709	SM008-TB01-0709FD	SM008-TB01-1113	SM008-TB01-1416	SM009-TB01-0001	SM009-TB01-0305	SM009-TB01-0305FD	SM009-TB01-1719
SAMPLE DEPTH(ft)	3.00-5.00	7.00-9.00	7.00-9.00	11.00-13.00	14.00-16.00	0.00-1.00	3.00-5.00	3.00-5.00	17.00-19.00
SAMPLE LOCATION	TB01	TB01	TB01	TB01	TB01	TB01	TB01	TB01	TB01
SAMPLE DATE	6/23/1997	6/23/1997	6/23/1997	6/23/1997	6/23/1997	6/24/1997	6/24/1997	6/24/1997	6/24/1997
PARAMETER									
N-Nitrosodiphenylamine	< 5790	14300 J	< 13700	28800 J	< 30500	< 2800	< 3050	< 3050	< 310
N-Nitrosodipropylamine	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
N-Nitrosopiperidine	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
Naphthalene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
Nitrobenzene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
Pentachlorobenzene	< 7570	< 3610 J	< 17900	R	< 39900	< 3670	< 3990	< 3990	< 400
Pentachloronitrobenzene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
Pentachlorophenol	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
Phenacetin	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
Phenanthrene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
Phenol	< 2670	< 1270 J	< 6330	R	< 14100	< 1290	< 1410	< 1410	< 140
Pyrene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
Pyridine	< 4900	< 2330 J	< 11600	R	< 25800	< 2370	< 2580	< 2580	< 260
Trimethylphosphate	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
Triphenylphosphate	< 22300	< 10600 J	< 52800	R	< 117000	< 10800	< 11700	< 11700	< 1180
m,p-Cresol	< 6680	< 3180 J	< 15800	R	< 35200	< 3230	< 3520	< 3520	< 350
m-Nitrotoluene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
m-Toluidine	< 8910	< 4240 J	< 21100	R	< 47000	< 4310	< 4690	< 4690	< 470
o,p-Toluidine	< 22700	< 10800 J	< 53800	R	< 120000	< 11000	< 12000	< 12000	< 1200
o-Cresol	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
o-Nitrotoluene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
p-Chloroaniline	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
p-Dimethylaminoazobenzene	< 4450	< 2120 J	< 10600	R	< 23500	< 2160	< 2340	< 2340	< 240
p-Nitrotoluene	< 6680	< 3180 J	< 15800	R	< 35200	< 3230	< 3520	< 3520	< 350
Metals (µg/kg)									
Antimony	< 445	< 424	< 422	< 432	< 469	< 431	< 469	< 469	< 471
Cadmium	26558	15603	9609	14391	1091	< 430 J	1080 J	< 470 J	< 470 J
Chromium	8783	5645	5820	7169	10470	7220	13300	15000	9150
Lead	6776	6095	5571	6033	12761	9830	17100	17500	12200
Nickel	304262	128332	152297	98612	30652	12100	87000	93100	13400
Miscellaneous (µg/kg)									
Percent Moisture	10.2%	5.71%	5.25%	5.58%	14.80%	7.3 %	15 %	NA	15 %
Total Organic Carbon	6200000 J	5600000 J	NA	9900000 J	NA	NA	NA	NA	NA
BTU from ECD	< 500 BTU	NA	NA	NA	NA	NA	NA	NA	NA
Ignitability (Flash Point) for S	Negative	NA	NA	NA	NA	NA	NA	NA	NA
Percent Ash	78 %	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, Additional inform

U=Nondetect at reported limit

<Nondetect at reported limit

BLE 4.4-1
Statistical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE PARAMETER	SM009-TB02-0001 0.00-1.00 TB02 6/24/1997	SM009-TB02-0305 3.00-5.00 TB02 6/24/1997	SM009-TB02-1719 17.00-19.00 TB02 6/24/1997	SM009-TB03-0001 0.00-1.00 TB03 6/24/1997	SM009-TB03-0305 3.00-5.00 TB03 6/24/1997	SM009-TB03-1012 10.00-12.00 TB03 6/24/1997	SM011-TB01-0001 0.00-1.00 TB01	SM011-TB01-0305 3.00-5.00 TB01
Volatiles (µg/kg)								
1,1,1,2-Tetrachloroethane	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
1,1,1-Trichloroethane	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
1,1,2,2-Tetrachloroethane	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
1,1,2-Trichloroethane	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
1,1-Dichloroethane	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
1,1-Dichloroethene	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
1,1-Dichloropropene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
1,2,3-Trichlorobenzene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
1,2,3-Trichloropropane	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
1,2,4-Trichlorobenzene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
1,2,4-Trimethylbenzene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
1,2-Dibromo-3-chloropropane	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
1,2-Dibromoethane	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
1,2-Dichlorobenzene	< 271	2020	1500	< 257	< 290	448 J	1860	< 744
1,2-Dichloroethane	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
1,2-Dichloropropane	< 412	< 405	< 438	< 391	< 441	< 448	< 416	< 422
1,3,5-Trimethylbenzene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
1,3-Dichlorobenzene	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
1,3-Dichloropropane	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
1,4-Dichlorobenzene	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
2,2-Dichloropropane	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
2-Butanone	< 954	< 937	< 1010	< 905	< 1020	< 1040	< 963	< 977
2-Chloroethyl Vinyl Ether	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
2-Chlorotoluene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
2-Hexanone	< 412	< 405	< 438	< 391	< 441	< 448	< 416	< 422
4-Chlorotoluene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
4-Methyl-2-pentanone	< 412	< 405	< 438	< 391	< 441	< 448	< 416	< 422
Acetone	< 954	< 937	< 1010	< 905	< 1020	< 1040	< 963	< 977
Acrolein	< 2710	< 2660	< 2880	< 2570	< 2900	< 2940	< 2740	< 2780
Acrylonitrile	< 1410	< 1380	< 1500	< 1340	< 1510	< 1530	< 1420	< 1440
Allyl Chloride	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
Benzene	< 141	< 138	196 J	< 134	< 151	< 153	< 142 UJ	< 144
Bromobenzene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
Bromochloromethane	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
Bromodichloromethane	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
Bromoform	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
Bromomethane	< 412	< 405	< 438	< 391	< 441	< 448	< 416	< 422
Carbon Disulfide	< 412	< 405	< 438	< 391	< 441	< 448	< 416	< 422
Carbon Tetrachloride	< 141	< 138	< 150	< 134	< 151	< 153	810	< 144
Chlorobenzene	998	2980	3690	195 J	4290	5420	1080	< 289
Chloroethane	< 412	< 405	< 438	< 391	< 441	< 448	< 416	< 422
Chloroform	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
Chloromethane	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
Dibromochloromethane	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
Dibromomethane	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
Dichlorodifluoromethane	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
Ethyl Methacrylate	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
Ethylbenzene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
Freon 113	369 J	< 266	< 288	360 J	< 290	< 294	< 274	< 278
Freon 141b	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
Hexachlorobutadiene	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
Isopropylbenzene	< 412	< 405	< 438	< 391	< 441	< 448	< 416	< 422
Methyl Iodide	< 412	< 405	< 438	< 391	< 441	< 448	< 416	< 422
Methylene Chloride	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID	SM009-TB02-0001	SM009-TB02-0305	SM009-TB02-1719	SM009-TB03-0001	SM009-TB03-0305	SM009-TB03-1012	SM011-TB01-0001	SM011-TB01-0305
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	17.00-19.00	0.00-1.00	3.00-5.00	10.00-12.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB02	TB02	TB02	TB03	TB03	TB03	TB01	TB01
SAMPLE DATE	6/24/1997	6/24/1997	6/24/1997	6/24/1997	6/24/1997	6/24/1997		
PARAMETER								
Naphthalene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
Styrene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
Tetrachloroethene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
Toluene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
Trichloroethene	< 141	405 J	404 J	< 134	< 151	< 153	< 142	< 144
Trichlorofluoromethane	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
Vinyl Acetate	< 412	< 405	< 438	< 391	< 441	< 448	< 416	< 422
Vinyl Chloride	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
cis-1,2-Dichloroethene	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
cis-1,3-Dichloropropene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
m+p-Xylene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
n-Butylbenzene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
n-Propylbenzene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
o-Xylene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
p-Isopropyltoluene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
sec-Butylbenzene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
tert-Butylbenzene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
trans-1,2-Dichloroethene	< 271	< 266	< 288	< 257	< 290	< 294	< 274	< 278
trans-1,3-Dichloropropene	< 141	< 138	< 150	< 134	< 151	< 153	< 142	< 144
trans-1,4-Dichloro-2-butene	< 1410	< 1380	< 1500	< 1340	< 1510	< 1530	< 1420	< 1440
Semi挥发物 ($\mu\text{g/kg}$)								
1,2,3-Trichlorobenzene	< 2600	< 2550	< 2770	< 2470	< 2780	< 2830	R	R
1,2,4,5-Tetrachlorobenzene	< 2600	< 2550	< 2770	< 2470	< 2780	< 2830	R	R
1,2,4-Trichlorobenzene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
1,2-Dichlorobenzene	< 2170	6260	< 2310	3680	< 2320	< 2360	3070J	3380J
1,3-Dichlorobenzene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
1,4-Dichlorobenzene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
1-Chloronaphthalene	< 5420	< 5320	< 5770	< 5140	< 5800	< 5890	R	R
1-Methylnaphthalene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
1-Naphthylamine	< 7370	< 7240	< 7840	< 6990	< 7890	< 8010	R	R
2,3,4,6-Tetrachlorophenol	< 4340	< 4260	< 4610	< 4110	< 4640	< 4710	R	R
2,3-Dichloroaniline	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
2,4,5-Trichlorophenol	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
2,4,6-Trichlorophenol	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
2,4-Dichlorophenol	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
2,4-Dimethylphenol	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
2,4-Dinitrophenol	< 13500	< 13200	< 14300	< 12800	< 14400	< 14600	R	R
2,4-Dinitrotoluene	< 2170	6510	1290000	< 2060	5990	< 2360	R	R
2,4-Toluenediamine	< 10800	< 10700	< 11500	< 10300	< 11600	< 11800	R	R
2,6-Dichlorophenol	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
2,6-Dinitrotoluene	< 2170	< 2130	1350000	< 2060	< 2320	< 2360	R	R
2-Chloronaphthalene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
2-Chlorophenol	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
2-Methylnaphthalene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
2-Naphthylamine	< 8240	< 8090	< 8770	< 7820	< 8820	< 8950	R	R
2-Nitroaniline	< 2600	< 2550	< 2770	< 2470	< 2780	< 2830	R	R
2-Nitrodiphenylamine	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
2-Nitrophenol	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
2-Picoline	< 8030	< 7880	< 8540	< 7610	< 8580	< 8720	R	R
3,3'-Dichlorobenzidine	< 13200	< 13000	< 14100	< 12600	< 14200	< 14400	R	R
3-Methylcholanthrene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
3-Nitroaniline	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
4,4' Methyleneedianiline	< 19100	< 18700	< 20300	< 18100	< 20400	< 20700	R	R
4,6-Dinitro-o-cresol	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R

BLE 4.4-1
Analitical Results for
SWMU Group C: SWMUS 7, 8, 9, and 11

SAMPLE ID	SM009-TB02-0001	SM009-TB02-0305	SM009-TB02-1719	SM009-TB03-0001	SM009-TB03-0305	SM009-TB03-1012	SM011-TB01-0001	SM011-TB01-0305
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	17.00-19.00	0.00-1.00	3.00-5.00	10.00-12.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB02	TB02	TB02	TB03	TB03	TB03	TB01	TB01
SAMPLE DATE	6/24/1997	6/24/1997	6/24/1997	6/24/1997	6/24/1997	6/24/1997		
PARAMETER								
4-Aminobiphenyl	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
4-Aminodiphenylamine	< 5420	< 5320	< 5770	< 5140	< 5800	< 5890	R	R
4-Bromophenyl phenyl ether	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
4-Chloro-m-cresol	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
4-Chlorophenylphenyl ether	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
4-Nitroaniline	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
4-Nitrophenol	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
5-Nitro-o-toluidine	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
7,12-dimethylbenz[a]anthracene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Acenaphthene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Acenaphthylene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Acetophenone	< 2820	< 2770	< 3000	< 2670	< 3020	< 3060	R	R
Aniline	< 3040	< 2980	< 2320	< 2880	< 3250	< 3300	R	R
Anthracene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Azobenzene	< 2600	< 2550	< 2770	< 2470	< 2780	< 2830	R	R
Benzidine	< 34700	< 34100	< 36900	< 32900	< 37100	< 37700	R	R
Benz(a)anthracene	< 2820	< 2770	< 3000	< 2670	< 3020	< 3060	R	R
Benz(a)pyrene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Benz(b)fluoranthene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Benz(ghi)perylene	< 2390	< 2340	< 2540	< 2260	< 2550	< 2590	R	R
Benz(k)fluoranthene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Benzoic Acid	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Benzyl Alcohol	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Benzyl butyl phthalate	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Bis(2-chloroethoxymethane)	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Bis(2-chloroethyl)ether	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Bis(2-chloroisopropyl)ether	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Bis(2-ethylhexyl) phthalate	< 2600	< 2550	< 2770	< 2470	< 2780	< 2830	R	R
Bisphenol A	< 3900 J	22400 J	37100 J	< 3700 J	126000 J	< 4240 J	4660JB	9440JB
Carbazole	< 10800	< 10700	< 11500	< 10300	< 11600	< 11800	R	R
Chrysene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Cyclohexanone	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Di-n-butyl phthalate	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Di-n-octyl phthalate	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Dibenzo(a,h)anthracene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Dibenzofuran	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Diethyl Phthalate	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Dimethylphthalate	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Ethyl Methane Sulfonate	< 3900	< 3830	< 4150	< 3700	< 4180	< 4240	R	R
Fluoranthene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Fluorene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Heptachlor	< 2390	< 2340	< 2540	< 2260	< 2550	< 2590	R	R
Hexachlorobenzene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Hexachlorobutadiene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Hexachlorocyclopentadiene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Hexachloroethane	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Indeno(1,2,3-cd)pyrene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Isophorone	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Methyl methane sulfonate	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
N-Nitrosodibutylamine	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
N-Nitrosodimethylamine	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R

TABLE 4.4-1
Soil Analytical Results for
SWMU Group C: SWMUs 7, 8, 9, and 11

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE PARAMETER	SM009-TB02-0001 0.00-1.00 TB02 6/24/1997	SM009-TB02-0305 3.00-5.00 TB02 6/24/1997	SM009-TB02-1719 17.00-19.00 TB02 6/24/1997	SM009-TB03-0001 0.00-1.00 TB03 6/24/1997	SM009-TB03-0305 3.00-5.00 TB03 6/24/1997	SM009-TB03-1012 10.00-12.00 TB03 6/24/1997	SM011-TB01-0001 0.00-1.00 TB01	SM011-TB01-0305 3.00-5.00 TB01
N-Nitrosodiphenylamine	< 2820	< 2770	< 3000	< 2670	< 3020	< 3060	R	R
N-Nitrosodipropylamine	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
N-Nitrosopiperidine	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Naphthalene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Nitrobenzene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Pentachlorobenzene	< 3690	< 3620	< 3920	< 3500	< 3940	< 4000	R	R
Pentachloronitrobenzene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Pentachlorophenol	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Phenacetin	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Phenanthrene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Phenol	< 1300	< 1280	< 1380	< 1230	1480	< 1410	R	R
Pyrene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Pyridine	< 2390	< 2340	< 2540	< 2260	< 2550	< 2590	R	R
Trimethylphosphate	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
Triphenylphosphate	< 10800	< 10700	< 11500	< 10300	< 11600	< 11800	R	R
m,p-Cresol	< 3250	< 3190	< 3460	< 3090	< 3480	< 3530	R	R
m-Nitrotoluene	< 2170	< 2130	19000	< 2060	< 2320	< 2360	R	R
m-Toluidine	< 4340	< 4260	< 4610	< 4110	< 4640	< 4710	R	R
o,p-Toluidine	< 11100	< 10900	< 11800	< 10500	< 11800	< 12000	R	R
o-Cresol	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
o-Nitrotoluene	< 2170	< 2130	41300	< 2060	< 2320	< 2360	R	R
p-Chloroaniline	14000	2830	< 2310	< 2060	129000	16100	3720J	R
p-Dimethylaminoazobenzene	< 2170	< 2130	< 2310	< 2060	< 2320	< 2360	R	R
p-Nitrotoluene	< 3250	< 3190	7130	< 3090	< 3480	< 3530	R	R
Metals (µg/kg)								
Antimony	< 434	< 426	< 461	< 411	< 464	< 471	< 438	< 444
Cadmium	840 J	880 J	840 J	960 J	1020 J	1320 J	< 440	< 440
Chromium	10800	9270	13700	16700	13400	18000	15635	26405
Lead	10800	9490	14900	12500	14700	16400	13315	12456
Nickel	27900	88300	32800	40700	68200	36600	50522	217442
Miscellaneous (µg/kg)								
Percent Moisture	7.8 %	6.1 %	13 %	2.8 %	14 %	15 %	8.65%	9.93%
Total Organic Carbon	5100000 J	12000000 J	NA	NA	NA	NA	10000000 J	400000 J
BTU from ECD	NA	< 500 BTU	NA	NA	NA	NA	NA	NA
Ignitability (Flash Point) for S	NA	Negative	NA	NA	NA	NA	NA	NA
Percent Ash	NA	68 %	NA	NA	NA	NA	NA	NA

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, Additional inform

U=Nondetect at reported limit

<=Nondetect at reported limit

LE 4.4-2
Summary of Field Observations
SWMU Group C: SWMU 7, 8, 9, and 11

Boring Number	SM007-								
	TB01	TB02	TB03	TB04	TB05	TB06	TB07	TB08	TB09
Concrete/Asphalt (ft-bgs) ⁽¹⁾	0-0.5					0-0.5	0-0.5	0-0.5	
Gravel (ft-bgs)	0.5- 8.5	0-7	0-1	0-3	0-3	0.5-3	0.5-3	0.5-1	0-3 / 5-9
Sand (ft-bgs)		17-21	3-9 / 14-25			5.5-11	3-11.5 / 20-25	1-9	20-24
Silty Sand (ft-bgs)	8.5-21	8-17	15-16		3-21		11.5-20		3-5 / 9-20
TDI Residue (ft-bgs)		7-8	15-15.5	7-9					
Silt/Clay (ft-bgs)			1-3 / 9-15 / 16-19	3-7		3-5.5		9-21	
Perched Groundwater (ft-bgs)	10.9	16.4				10.5		7.9	
Groundwater (ft-bgs)	17	19.1	15.1		18.6	17	19.1	NR ⁽²⁾	18.2
Total Depth (ft-bgs)	21	21	25	9 (refusal)	21	21	25	21	24
OVM ⁽³⁾ Readings (ppm ⁽⁴⁾ @ ft-bgs)	48.8 @ 7-9 4.0 @ 11-1	19.8 @ 3-5 13.3 @ 7-8 110 @ 11-13 40.8 @ 15-17 7.9 @ 17-19	16.8 @ 13-15 436 @ 7-9	86.9 @ 3-5 1.9 @ 16-1	623 @ 0-1 9 @ 3-5 274.7 @ 15-17 475.2 @ 20-21	5 @ 3-5 5.2 @ 7-9 5 @ 11-12 9.9 @ 15-17 24 @ 17-19 8.2 @ 23-25	20.4 @ 3-5 29.2 @ 7-9 28 @ 11-13 70.2 @ 15-17	2 @ 3-5 11 @ 9-10	
Additional Observations		Located at GPR anomaly found during Phase 1		Tar-like substance at 7-9 ft bgs		TDI residue mixed with glass & ashes within sands @ 5.5-11 ft-bgs.	Nails in sand @3-11 ft-bgs.	Angular pieces of concrete @ 9-11 ft-bgs.	

NOTES:

⁽¹⁾ ft-bgs = Feet Below Ground Surface

⁽²⁾ NR = No Recovery

⁽³⁾ OVM = Organic Vapor Monitor

⁽⁴⁾ ppm = Parts per Million

TABLE 4.4-2
Summary of Field Observations
SWMU Group C: SWMU 7, 8, 9, and 11

Boring Number	SM007-						SM008-	SM009-			SM011
	TB10	TB11	TB12	TB13	TB14	TB15		TB01	TB02	TB03	TB01
Concrete/Asphalt (ft-bgs) ⁽¹⁾						0-0.5					
Gravel (ft-bgs)	0-16	0-1	11.5-12	0-0.5	0-1	0.5-1	0-13	0-1	0-13.5 / 18.5-21	0-2	0-14.7
Sand (ft-bgs)		1-17.5	23.5-24 / 26.5-28			20-24					
Silty Sand (ft-bgs)	16.5-18	17.5-21	0-1 / 12-23.5 / 24-26.5	0.5-4 / 8-20		16-20		10.5-17		5-12.5	
TDI Residue (ft-bgs)										12.5-13	
Silt/Clay (ft-bgs)			1-11.5	4-8	1-12	1-16	14-17	1-10.5 / 17-21	13.5-18.5	2-5	
Perched Groundwater (ft-bgs)					11.7						
Groundwater (ft-bgs)	17	19.8	27.2	19.6		19	13	19.6	19.4	12.3	
Total Depth (ft-bgs)	18	21	28	20	12	24	17	21	21	21	14.7 (refusal)
OVM ⁽³⁾ Readings (ppm(4) @ ft-bgs)	173 @ 12-17 28 @ 17-18		0 @ 0-4 2 @ 4-8 9 @ 8-12 2 @ 12-16 3 @ 16-20 1 @ 20-24 2 @ 24-28	1 @ 0-4 3 @ 4-8 0 @ 8-20	0 @ 0-4 5 @ 4-8 2 @ 8-12	0 @ 0-12 33 @ 12-16 10 @ 16-20 1 @ 20-24	167 @ 0-1 200 @ 3-5 829 @ 5-9 529 @ 9-13 537 @ 13-17	0 @ 1-3 20 @ 3-5 9 @ 5-9 10 @ 9-13 1 @ 13-17 2 @ 17-21	0 @ 1-13 4 @ 13-17 3 @ 17-21	1 @ 0-1 0 @ 1-3 2 @ 3-5 0 @ 5-9 2 @ 9-13	0 @ 0-14.7
Additional Observations	Located within SWMU 11									No recovery from 13 to 21 ft bgs	

NOTES:

⁽¹⁾ ft-bgs = Feet Below Ground Surface

⁽²⁾ NR = No Recovery

⁽³⁾ OVM = Organic Vapor Monitor

⁽⁴⁾ ppm = Parts per Million

TABLE 4.4-3
Screening of Total Soils to Risk-Based Screening Criteria: SWMU Group C

Constituent	CAS Number	Units	Frequency of Detection	Range of Detections	Sample of Maximum Detection	Range of Detection Limits	Sample of Maximum Detection Limit	Region III Industrial Soil RBC ¹	Region III Residential Soil RBC ¹	Maximum Detection or Detection Limit Exceeds Industrial RBC	Maximum Detection or Detection Limit Exceeds Residential RBC	
METALS												
Cadmium	7440-43-9	mg/kg	38 - 53	0.00061 - 26.8	SM008-TB01-0305	0.0006 - 0.48	SM007-TB06-1517	2.0E+03	7.8E+01	No	No	
Lead	7439-92-1	mg/kg	53 - 53	0.0095 - 1037	SM007-TB06-0810	NA	NA	4.0E+02	2.0E+02	Max. Det.>Ind RBC	Max. Det.>Res RBC	
Nickel	7440-02-0	mg/kg	53 - 53	0.0076 - 2909	SM007-TB06-0810	NA	NA	4.1E+04	1.6E+03	No	Max. Det.>Res RBC	
PESTICIDES/HERBICIDES												
Heptachlor	76-44-8	mg/kg	0 - 43	NA		0.09 - 126	SM007-TB02-1416	1.3E+00	1.4E-01	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
SEMITOLATILE ORGANIC COMPOUNDS												
1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	0 - 44	NA		0.13 - 137	SM007-TB02-1416	6.1E+02	2.3E+01	No	Max. D.L.>Res RBC	
1,3-Dichlorobenzene	541-73-1	mg/kg	0 - 44	NA		0.09 - 115	SM007-TB02-1416	1.8E+03	7.0E+01	No	Max. D.L.>Res RBC	
1,4-Dichlorobenzene	106-46-7	mg/kg	8 - 45	0.35 - 71.1	SM008-TB01-1416	0.11 - 115	SM007-TB02-1416	2.4E+02	2.7E+01	No	Max. Det.& D.L.> Res RBC	
2,4,6-Trichlorophenol	88-06-2	mg/kg	0 - 44	NA		0.12 - 115	SM007-TB02-1416	5.2E+02	5.8E+01	No	Max. D.L.>Res RBC	
2,4-Dinitrophenol	51-28-5	mg/kg	0 - 44	NA		0.81 - 710	SM007-TB02-1416	4.1E+03	1.6E+02	No	Max. D.L.>Res RBC	
2,4-Dinitrotoluene	121-14-2	mg/kg	15 - 44	0.25 - 6230	SM007-TB02-1416	0.22 - 60.3	SM007-TB04-0709	4.1E+03	1.6E+02	Max. Det.>Ind RBC	Max. Det.>Res RBC	
2,4-Toluenediamine	95-80-7	mg/kg	7 - 44	1.3 - 12300	SM007-TB04-0709	1.18 - 573	SM007-TB02-1416	1.8E+00	2.0E-01	Max. Det.& D.L.> Ind RBC	Max. Det.& D.L.> Res RBC	
2,6-Dinitrotoluene	606-20-2	mg/kg	11 - 44	0.2 - 3570	SM007-TB02-1416	0.13 - 60.3	SM007-TB04-0709	2.0E+03	7.8E+01	Max. Det.>Ind RBC	Max. Det.>Res RBC	
2-Nitrotoluene	88-72-2	mg/kg	8 - 44	28.7 - 3400	SM007-TB02-1416	0.13 - 60.3	SM007-TB04-0709	2.0E+04	7.8E+02	No	Max. Det.>Res RBC	
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0 - 44	NA		0.28 - 699	SM007-TB02-1416	1.3E+01	1.4E+00	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
4,6-Dinitro-o-cresol	534-52-1	mg/kg	0 - 44	NA		0.22 - 115	SM007-TB02-1416	2.0E+02	7.8E+00	No	Max. D.L.>Res RBC	
4-Nitrotoluene	99-99-0	mg/kg	7 - 44	3.29 - 1940	SM007-TB02-1416	0.1 - 90.4	SM007-TB04-0709	2.0E+04	7.8E+02	No	Max. Det.>Res RBC	
5-Nitro-o-toluidine	99-55-8	mg/kg	6 - 44	0.19 - 160	SM007-TB06-0001	0.11 - 115	SM007-TB02-1416	1.7E+02	1.9E+01	No	Max. Det.& D.L.> Res RBC	
Aniline	62-53-3	mg/kg	10 - 45	0.76 - 809	SM007-TB06-1517	0.33 - 160	SM007-TB02-1416	1.0E+03	1.1E+02	No	Max. Det.& D.L.> Res RBC	
Azobenzene	103-33-3	mg/kg	0 - 44	NA		0.13 - 137	SM007-TB02-1416	5.2E+01	5.8E+00	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
Benzidine	92-87-5	mg/kg	0 - 43	NA		1.5 - 1830	SM007-TB02-1416	2.5E-02	2.8E-03	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
Benzo(a)anthracene	56-55-3	mg/kg	1 - 44	26.4 - 26.4	SM007-TB03-1315	0.13 - 149	SM007-TB02-1416	7.8E+00	8.8E-01	Max. Det.& D.L.> Ind RBC	Max. Det.& D.L.> Res RBC	
Benzo(a)pyrene	50-32-8	mg/kg	1 - 41	14.9 - 14.9	SM007-TB03-1315	0.22 - 115	SM007-TB02-1416	7.8E-01	8.7E-02	Max. Det.& D.L.> Ind RBC	Max. Det.& D.L.> Res RBC	
Benzo(b)fluoranthene	205-99-2	mg/kg	1 - 41	15.2 - 15.2	SM007-TB03-1315	0.1 - 115	SM007-TB02-1416	7.8E+00	8.8E-01	Max. Det.& D.L.> Ind RBC	Max. Det.& D.L.> Res RBC	
Benzo(k)fluoranthene	207-08-9	mg/kg	1 - 44	25 - 25	SM007-TB03-1315	0.14 - 115	SM007-TB02-1416	7.8E+01	8.8E+00	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
bis(2-Chloroethyl)ether	111-44-4	mg/kg	0 - 44	NA		0.1 - 115	SM007-TB02-1416	5.2E+00	5.8E-01	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
bis(2-Chloroisopropyl)ether	108-60-1	mg/kg	0 - 44	NA		0.1 - 115	SM007-TB02-1416	8.2E+01	9.1E+00	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
Carbazole	117-81-7	mg/kg	7 - 45	0.32 JB - 1.52	B	SM007-TB08-1517	0.13 - 137	SM007-TB02-1416	4.1E+02	4.6E+01	No	Max. D.L.>Ind RBC
Chrysene	86-74-8	mg/kg	0 - 43	NA		0.08 - 573	SM007-TB02-1416	2.9E+02	3.2E+01	Max. D.L.>Res RBC	Max. D.L.>Res RBC	
Dibenz(a,h)anthracene	218-01-9	mg/kg	1 - 44	26.4 - 26.4	SM007-TB03-1315	0.13 - 115	SM007-TB02-1416	7.8E+02	8.7E+01	No	Max. D.L.>Res RBC	
Hexachlorobenzene	53-70-3	mg/kg	0 - 44	NA		0.15 - 115	SM007-TB02-1416	7.8E-01	8.7E-02	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
Hexachlorobutadiene	87-68-3	mg/kg	0 - 44	NA		0.1 - 115	SM007-TB02-1416	7.3E+01	8.2E+00	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
Hexachloroethane	67-72-1	mg/kg	0 - 44	NA		0.1 - 115	SM007-TB02-1416	4.1E+02	4.6E+01	No	Max. D.L.>Res RBC	
Indeno[1,2,3-cd]pyrene	193-39-5	mg/kg	0 - 44	NA		0.16 - 115	SM007-TB02-1416	7.8E+00	8.8E-01	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
m-toluidine	108-44-1	mg/kg	0 - 44	NA		0.09 - 229	SM007-TB02-1416	3.0E+01	3.4E+00	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
Nitrobenzene	98-95-3	mg/kg	0 - 44	NA		0.1 - 115	SM007-TB02-1416	1.0E+03	3.9E+01	No	Max. D.L.>Res RBC	
N-nitrosodibutylamine	924-16-3	mg/kg	0 - 44	NA		0.14 - 115	SM007-TB02-1416	1.1E+00	1.2E-01	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
N-Nitrosodimethylamine	62-75-9	mg/kg	0 - 44	NA		0.1 - 115	SM007-TB02-1416	1.1E-01	1.3E-02	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
n-Nitrosodi-n-propylamine	621-64-7	mg/kg	0 - 44	NA		0.1 - 115	SM007-TB02-1416	8.2E-01	9.1E-02	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
n-Nitrosodiphenylamine	86-30-6	mg/kg	2 - 45	14.3 J - 28.8	J	SM008-TB01-1113	0.29 - 149	SM007-TB02-1416	1.2E+03	1.3E+02	No	Max. D.L.>Res RBC
o,p-toluidine	106-49-0	mg/kg	4 - 44	0.11 - 26		SM007-TB06-0001	1.14 - 584	SM007-TB02-1416	3.0E+01	3.4E+00	Max. D.L.>Ind RBC	Max. Det.& D.L.> Res RBC
Pentachlorobenzene	608-93-5	mg/kg	0 - 44	NA		0.13 - 195	SM007-TB02-1416	1.6E+03	6.3E+01	No	Max. D.L.>Res RBC	
Pentachloronitrobenzene	82-68-8	mg/kg	0 - 44	NA		0.08 - 115	SM007-TB02-1416	2.2E+01	2.5E+00	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
Pentachlorophenol	87-86-5	mg/kg	0 - 44	NA		0.22 - 115	SM007-TB02-1416	4.8E+01	5.3E+00	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
Pyridine	110-86-1	mg/kg	0 - 44	NA		0.1 - 126	SM007-TB02-1416	2.0E+03	7.8E+01	No	Max. D.L.>Res RBC	
Trimethylphosphate	512-56-1	mg/kg	0 - 44	NA		0.1 - 115	SM007-TB02-1416	1.5E+02	1.7E+01	No	Max. D.L.>Res RBC	
VOLATILE ORGANIC COMPOUNDS												
1,1-Dichloroethene	75-35-4	mg/kg	0 - 53	NA		0.257 - 5.87	SM008-TB01-1416	9.5E+00	1.1E+00	No	Max. D.L.>Res RBC	
1,2,3-Trichloropropane	96-18-4	mg/kg	0 - 53	NA		0.134 - 2.93	SM008-TB01-1416	8.2E-01	9.1E-02	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg	0 - 53	NA		0.257 - 5.87	SM008-TB01-1416	4.1E+00	4.6E-01	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
1,2-Dibromoethane	106-93-4	mg/kg	0 - 53	NA		0.134 - 2.93	SM008-TB01-1416	6.7E-02	7.5E-03	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
Acrylonitrile	107-13-1	mg/kg	0 - 53	NA		1.34 - 29.3	SM008-TB01-1416	1.1E+01	1.2E+00	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	
Benzene	71-43-2	mg/kg	15 - 53	0.138 J - 313		0.134 - 1.67	SM007-TB04-0709	2.0E+02	2.2E+01	Max. Det.>Ind RBC	Max. Det.>Res RBC	
Chlorobenzene	108-90-7	mg/kg	46 - 53	0.139 J - 1620		0.143 - 0.155	SM007-TB05-1618	4.1E+04	1.6E+03	No	Max. Det.>Res RBC	
Vinyl Chloride	75-01-4	mg/kg	0 - 53	NA		0.257 - 5.87	SM008-TB01-1416	3.0E+00	3.4E-01	Max. D.L.>Ind RBC	Max. D.L.>Res RBC	

¹ Industrial and Residential RBCs for Soil (USEPA, 1999)

TABLE 4.4-4
Screening of Total Soils to USEPA Leaching Soil Screening Levels: SWMU Group C

Constituent	CAS Number	Units	Frequency of Detection	Range of Detections	Sample of Maximum Detection	Range of Detection Limits	Sample of Maximum Detection Limit	Soil Screening Level ¹ 20 DAF	Maximum Detection or Detection Limit Exceeds SSL	
METALS										
Cadmium	7440-43-9	mg/kg	38 - 53	0.00061 - 26.8	SM008-TB01-0305	0.43 - 0.48	SM007-TB06-1517	8.0E+00	Max. Det.>SSL	
Chromium	7440-47-3	mg/kg	53 - 53	0.00453 - 308	SM007-TB07-0001	NA	NA	3.8E+01	Max. Det.>SSL	
Nickel	7440-02-0	mg/kg	53 - 53	0.00761 - 2909	SM007-TB06-0810	NA	NA	1.3E+02	Max. Det.>SSL	
PESTICIDES/HERBICIDES										
Heptachlor	76-44-8	mg/kg	0 - 43	NA		0.09 - 126	SM007-TB02-1416	2.3E+01	Max. D.L.>SSL	
SEMOVOLATILE ORGANIC COMPOUNDS										
1,2,3-Trichlorobenzene	87-61-6	mg/kg	0 - 44	NA		0.12 - 137	SM007-TB02-1416	5.0E+00	Max. D.L.>SSL	
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0 - 44	NA		0.12 - 115	SM007-TB02-1416	5.0E+00	Max. D.L.>SSL	
1,2-Dichlorobenzene	95-50-1	mg/kg	30 - 44	0.17 - 2120	SM008-TB01-1416	0.24 - 115	SM007-TB02-1416	1.7E+01	Max. Det. & D.L. > SSL	
1,3-Dichlorobenzene	541-73-1	mg/kg	0 - 44	NA		0.09 - 115	SM007-TB02-1416	1.7E+01	Max. D.L.>SSL	
1,4-Dichlorobenzene	106-46-7	mg/kg	8 - 44	0.35 - 71.1	SM008-TB01-1416	0.11 - 115	SM007-TB02-1416	2.0E+00	Max. Det. & D.L. > SSL	
2,4,6-Trichlorophenol	88-06-2	mg/kg	0 - 44	NA		0.12 - 115	SM007-TB02-1416	2.0E-01	Max. D.L.>SSL	
2,4-Dichlorophenol	120-83-2	mg/kg	0 - 44	NA		0.13 - 115	SM007-TB02-1416	1.0E+00	Max. D.L.>SSL	
2,4-Dimethylphenol	105-67-9	mg/kg	0 - 44	NA		0.13 - 115	SM007-TB02-1416	9.0E+00	Max. D.L.>SSL	
2,4-Dinitrophenol	51-28-5	mg/kg	0 - 44	NA		0.81 - 710	SM007-TB02-1416	3.0E-01	Max. D.L.>SSL	
2,4-Dinitrotoluene	121-14-2	mg/kg	15 - 44	0.25 - 6230	SM007-TB02-1416	0.22 - 60.3	SM007-TB04-0709	8.0E-04	Max. Det. & D.L. > SSL	
2,6-Dichlorophenol	87-65-0	mg/kg	0 - 44	NA		0.13 - 115	SM007-TB02-1416	1.0E+00	Max. D.L.>SSL	
2,6-Dinitrotoluene	606-20-2	mg/kg	11 - 44	0.2 - 3570	SM007-TB02-1416	0.13 - 60.3	SM007-TB04-0709	7.0E-04	Max. Det. & D.L. > SSL	
2-Chlorophenol	95-57-8	mg/kg	0 - 44	NA		0.1 - 115	SM007-TB02-1416	4.0E+00	Max. D.L.>SSL	
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0 - 44	NA		0.28 - 699	SM007-TB02-1416	7.0E-03	Max. D.L.>SSL	
Benzo(a)anthracene	56-55-3	mg/kg	1 - 44	26.4 - 26.4	SM007-TB03-1315	0.13 - 149	SM007-TB02-1416	2.0E+00	Max. Det. & D.L. > SSL	
Benzo(a)pyrene	50-32-8	mg/kg	1 - 44	14.9 - 14.9	SM007-TB03-1315	0.22 - 115	SM007-TB02-1416	8.0E+00	Max. Det. & D.L. > SSL	
Benzo(b)fluoranthene	205-99-2	mg/kg	1 - 44	15.2 - 15.2	SM007-TB03-1315	0.1 - 115	SM007-TB02-1416	5.0E+00	Max. Det. & D.L. > SSL	
Benzo(k)fluoranthene	207-08-9	mg/kg	1 - 44	25 - 25	SM007-TB03-1315	0.14 - 115	SM007-TB02-1416	4.9E+01	Max. D.L.>SSL	
bis(2-Chloroethyl)ether	111-44-4	mg/kg	0 - 44	NA		0.1 - 115	SM007-TB02-1416	4.0E-04	Max. D.L.>SSL	
Carbazole	86-74-8	mg/kg	0 - 43	NA		0.08 - 573	SM007-TB02-1416	6.0E-01	Max. D.L.>SSL	
Dibenz(a,h)anthracene	53-70-3	mg/kg	0 - 44	NA		0.15 - 115	SM007-TB02-1416	2.0E+00	Max. D.L.>SSL	
Hexachlorobenzene	118-74-1	mg/kg	0 - 44	NA		0.16 - 115	SM007-TB02-1416	2.0E+00	Max. D.L.>SSL	
Hexachlorobutadiene	87-68-3	mg/kg	0 - 44	NA		0.1 - 115	SM007-TB02-1416	2.0E+00	Max. D.L.>SSL	
Hexachloroethane	67-72-1	mg/kg	0 - 44	NA		0.1 - 115	SM007-TB02-1416	5.0E-01	Max. D.L.>SSL	
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0 - 44	NA		0.16 - 115	SM007-TB02-1416	1.4E+01	Max. D.L.>SSL	
Isophorone	78-59-1	mg/kg	0 - 44	NA		0.14 - 115	SM007-TB02-1416	5.0E-01	Max. D.L.>SSL	
m, p-cresol	108-39-4	mg/kg	0 - 44	NA		0.21 - 172	SM007-TB02-1416	1.5E+01	Max. D.L.>SSL	
Naphthalene	91-20-3	mg/kg	3 - 44	0.43 J - 3.28	J	SM007-TB04-0305	0.12 - 115	SM007-TB02-1416	8.4E+01	Max. D.L.>SSL
Nitrobenzene	98-95-3	mg/kg	0 - 44	NA		0.1 - 115	SM007-TB02-1416	1.0E-01	Max. D.L.>SSL	
n-Nitroso-di-n-propylamine	621-64-7	mg/kg	0 - 44	NA		0.1 - 115	SM007-TB02-1416	5.0E-05	Max. D.L.>SSL	
n-Nitrosodiphenylamine	86-30-6	mg/kg	2 - 45	14.3 J - 28.8	J	SM008-TB01-1113	0.29 - 149	SM007-TB02-1416	1.0E+00	Max. Det. & D.L. > SSL
o-Cresol	95-48-7	mg/kg	0 - 44	NA		0.09 - 115	SM007-TB02-1416	1.5E+01	Max. D.L.>SSL	
p-Chloroaniline	106-47-8	mg/kg	18 - 46	0.33 - 268		SM007-TB04-0709	0.1 - 115	SM007-TB02-1416	7.0E-01	Max. Det. & D.L. > SSL
Pentachlorophenol	87-86-5	mg/kg	0 - 44	NA		0.22 - 115	SM007-TB02-1416	3.0E-02	Max. D.L.>SSL	
VOLATILE ORGANIC COMPOUNDS										
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0 - 53	NA		0.257 - 5.87	SM008-TB01-1416	3.0E-03	Max. D.L.>SSL	
1,1,1-Trichloroethane	71-55-6	mg/kg	0 - 53	NA		0.134 - 2.93	SM008-TB01-1416	2.0E+00	Max. D.L.>SSL	
1,1,2-Tetrachloroethane	79-34-5	mg/kg	0 - 53	NA		0.134 - 2.93	SM008-TB01-1416	3.0E-03	Max. D.L.>SSL	
1,1,2-Trichloroethane	79-00-5	mg/kg	0 - 53	NA		0.257 - 5.87	SM008-TB01-1416	2.0E-02	Max. D.L.>SSL	
1,1-Dichloroethene	75-35-4	mg/kg	0 - 53	NA		0.257 - 5.87	SM008-TB01-1416	6.0E-02	Max. D.L.>SSL	
1,1-Dichloropropene	563-58-6	mg/kg	0 - 53	NA		0.134 - 2.93	SM008-TB01-1416	4.0E-03	Max. D.L.>SSL	

LE 4.4-4
Screening of Total Soils to USEPA Screening Soil Screening Levels: SWMU Group C

Constituent	CAS Number	Units	Frequency of Detection	Range of Detections	Sample of Maximum Detection	Range of Detection Limits	Sample of Maximum Detection Limit	Soil Screening Level ¹ 20 DAF	Maximum Detection or Detection Limit Exceeds SSL
1,2-Dichloroethane	107-06-2	mg/kg	0 - 53	NA		0.257 - 5.87	SM008-TB01-1416	2.0E-02	Max. D.L. >SSL
1,2-Dichloropropane	78-87-5	mg/kg	0 - 53	NA		0.391 - 8.8	SM008-TB01-1416	3.0E-02	Max. D.L. >SSL
1,3-Dichloropropane	142-28-9	mg/kg	0 - 53	NA		0.134 - 2.93	SM008-TB01-1416	3.0E-02	Max. D.L. >SSL
2,2-Dichloropropane	590-20-7	mg/kg	0 - 53	NA		0.134 - 2.93	SM008-TB01-1416	3.0E-02	Max. D.L. >SSL
Acetone	67-64-1	mg/kg	0 - 53	NA		0.905 - 21.1	SM008-TB01-1416	1.6E+01	Max. D.L. >SSL
Benzene	71-43-2	mg/kg	15 - 53	0.138 J - 313	SM008-TB01-1113	0.134 - 1.67	SM007-TB04-0709	3.0E-02	Max. Det. & D.L. > SSL
Bromodichloromethane	75-27-4	mg/kg	0 - 53	NA		0.257 - 5.87	SM008-TB01-1416	6.0E-01	Max. D.L. >SSL
Bromomethane	74-83-9	mg/kg	0 - 53	NA		0.391 - 8.8	SM008-TB01-1416	2.0E-01	Max. D.L. >SSL
Carbon tetrachloride	56-23-5	mg/kg	1 - 53	0.81 - 0.81	SM011-TB01-0001	0.134 - 2.93	SM008-TB01-1416	7.0E-02	Max. Det. & D.L. > SSL
Chlorobenzene	108-90-7	mg/kg	46 - 53	0.139 J - 1620	SM008-TB01-1113	0.143 - 0.155	SM007-TB05-1618	1.0E+00	Max. Det.>SSL
cis-1,2-Dichloroethene	156-59-2	mg/kg	2 - 53	0.319 J - 0.372	J SM007-TB08-1517	0.257 - 5.87	SM008-TB01-1416	4.0E-01	Max. D.L. >SSL
Dibromochloromethane	124-48-1	mg/kg	0 - 53	NA		0.134 - 2.93	SM008-TB01-1416	4.0E-01	Max. D.L. >SSL
Methylene chloride	75-09-2	mg/kg	1 - 53	4.64 J - 4.64	J SM008-TB01-1113	0.257 - 5.87	SM008-TB01-1416	2.0E-02	Max. Det. & D.L. > SSL
m, p-xylene	1330-20-7	mg/kg	11 - 53	0.293 J - 8.69	J SM008-TB01-1618	0.13 - 278	SM008-TB01-0305	2.0E+02	Max. D.L. >SSL
Tetrachloroethene	127-18-4	mg/kg	1 - 53	0.574 J - 0.574	J SM007-TB02-0305	0.134 - 2.93	SM008-TB01-1416	6.0E-02	Max. Det. & D.L. > SSL
Toluene	108-88-3	mg/kg	16 - 53	0.14 J - 1400	SM008-TB01-1113	0.134 - 0.164	SM007-TB06-0810	1.2E+01	Max. Det.>SSL
trans-1,2-Dichloroethene	156-60-5	mg/kg	0 - 53	NA		0.257 - 5.87	SM008-TB01-1416	7.0E-01	Max. D.L. >SSL
Tribromomethane	75-25-2	mg/kg	0 - 53	NA		0.134 - 2.93	SM008-TB01-1416	8.0E-01	Max. D.L. >SSL
Trichloroethene	79-01-6	mg/kg	5 - 53	0.218 J - 1.35	SM007-TB08-1517	0.134 - 2.93	SM008-TB01-1416	6.0E-02	Max. Det. & D.L. > SSL
Trichloromethane	67-66-3	mg/kg	0 - 53	NA		0.134 - 2.93	SM008-TB01-1416	6.0E-01	Max. D.L. >SSL
Vinyl Chloride	75-01-4	mg/kg	0 - 53	NA		0.257 - 5.87	SM008-TB01-1416	1.0E-02	Max. D.L. >SSL

¹ USEPA Soil Screening Levels (USEPA, 1996)

TABLE 4.4-5
Screening of Surface Soils (0-2 feet) to Risk-Based Screening Criteria: SWMU Group C

Constituent	CAS Number	Units	Frequency of Detection	Range of Detections	Sample of Maximum Detection	Range of Detection Limits	Sample of Maximum Detection Limit	Region III Industrial Soil	Maximum Detection or Detection Limit Exceeds RBC
METALS									
Lead	7439-92-1	mg/kg	16 - 16	0.0116 - 91.2	SM007-TB04-0001	NA		4.0E+02	No
PESTICIDES/HERBICIDES									
Heptachlor	76-44-8	mg/kg	0 - 16	NA		0.09 - 9.8	SM007-TB06-0001	1.3E+00	Max. D.L. > Ind RBC
SEMOVOLATILE ORGANIC COMPOUNDS									
2,4-Dinitrotoluene	121-14-2	mg/kg	4 - 16	0.37 - 1600	SM007-TB06-0001	2.06 - 2.24	SM007-TB08-0001	4.1E+03	No
2,4-Toluenediamine	95-80-7	mg/kg	3 - 16	1.3 - 69.6	SM007-TB10-0001	3.6 - 11.2	SM007-TB08-0001	1.8E+00	Max. Det. & D.L. > Ind RBC
2,6-Dinitrotoluene	606-20-2	mg/kg	3 - 16	0.2 - 380	SM007-TB06-0001	0.13 - 2.24	SM007-TB08-0001	2.0E+03	No
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0 - 16	NA		0.28 - 29	SM007-TB06-0001	1.3E+01	Max. D.L. > Ind RBC
Azobenzene	103-33-3	mg/kg	0 - 16	NA		0.13 - 13	SM007-TB06-0001	5.2E+01	No
Benzidine	92-87-5	mg/kg	0 - 16	NA		1.5 - 160	SM007-TB06-0001	2.5E-02	Max. D.L. > Ind RBC
Benzo(a)anthracene	56-55-3	mg/kg	0 - 16	NA		0.13 - 13	SM007-TB06-0001	7.8E+00	Max. D.L. > Ind RBC
Benzo(a)pyrene	50-32-8	mg/kg	0 - 16	NA		0.13 - 13	SM007-TB06-0001	7.8E-01	Max. D.L. > Ind RBC
Benzo(b)fluoranthene	205-99-2	mg/kg	0 - 16	NA		0.1 - 11	SM007-TB06-0001	7.8E+00	Max. D.L. > Ind RBC
Benzo(k)fluoranthene	207-08-9	mg/kg	0 - 16	NA		0.14 - 15	SM007-TB06-0001	7.8E+01	No
bis(2-Chloroethyl)ether	111-44-4	mg/kg	0 - 16	NA		0.1 - 11	SM007-TB06-0001	5.2E+00	Max. D.L. > Ind RBC
bis(2-Chloroisopropyl)ether	108-60-1	mg/kg	0 - 16	NA		0.1 - 11	SM007-TB06-0001	8.2E+01	No
Carbazole	86-74-8	mg/kg	0 - 16	NA		0.08 - 11.2	SM007-TB08-0001	2.9E+02	No
Dibenz(a,h)anthracene	53-70-3	mg/kg	0 - 16	NA		0.15 - 16	SM007-TB06-0001	7.8E-01	Max. D.L. > Ind RBC
Hexachlorobenzene	118-74-1	mg/kg	0 - 16	NA		0.16 - 17	SM007-TB06-0001	3.6E+00	Max. D.L. > Ind RBC
Hexachlorobutadiene	87-68-3	mg/kg	0 - 16	NA		0.1 - 11	SM007-TB06-0001	7.3E+01	No
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0 - 16	NA		0.16 - 17	SM007-TB06-0001	7.8E+00	Max. D.L. > Ind RBC
m-toluidine	108-44-1	mg/kg	0 - 16	NA		0.09 - 9.8	SM007-TB06-0001	3.0E+01	No
N-nitrosodibutylamine	924-16-3	mg/kg	0 - 16	NA		0.14 - 15	SM007-TB06-0001	1.1E+00	Max. D.L. > Ind RBC
N-Nitrosodimethylamine	62-75-9	mg/kg	0 - 16	NA		0.1 - 11	SM007-TB06-0001	1.1E-01	Max. D.L. > Ind RBC
n-Nitroso-di-n-propylamine	621-64-7	mg/kg	0 - 16	NA		0.1 - 11	SM007-TB06-0001	8.2E-01	Max. D.L. > Ind RBC
o,p-toluidine	106-49-0	mg/kg	3 - 16	0.11 - 26	SM007-TB06-0001	10.5 - 11.5	SM007-TB08-0001	3.0E+01	No
Pentachloronitrobenzene	82-68-8	mg/kg	0 - 16	NA		0.08 - 8.5	SM007-TB06-0001	2.2E+01	No
Pentachlorophenol	87-86-5	mg/kg	0 - 16	NA		0.29 - 31	SM007-TB06-0001	4.8E+01	No
VOLATILE ORGANIC COMPOUNDS									
1,2,3-Trichloropropane	96-18-4	mg/kg	0 - 16	NA		0.134 - 1.06	SM007-TB06-0001	8.2E-01	Max. D.L. > Ind RBC
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg	0 - 16	NA		0.257 - 2.11	SM007-TB06-0001	4.1E+00	No
1,2-Dibromoethane	106-93-4	mg/kg	0 - 16	NA		0.134 - 1.06	SM007-TB06-0001	6.7E-02	Max. D.L. > Ind RBC
Acrylonitrile	107-13-1	mg/kg	0 - 16	NA		1.34 - 10.6	SM007-TB06-0001	1.1E+01	No
Benzene	71-43-2	mg/kg	3 - 16	0.212 J - 1.88	J	0.134 - 1.06	SM007-TB06-0001	2.0E+02	No
Vinyl Chloride	75-01-4	mg/kg	0 - 16	NA		0.257 - 2.11	SM007-TB06-0001	3.0E+00	No

¹ Region III Industrial RBCs for Soil (USEPA, Region III, 1999)

NOTE: Only those constituents whose detected concentration or detection limit exceeded the Industrial Soil RBC in the Total Soils Screening are presented here.

Constituent	CAS Number	Units	Frequency of Detection	Range of Detections	Sample of Maximum Detection	Range of Detection Limits	Sample of Maximum Detection Limit	Region III Industrial Soil RBC	Maximum Detection or Detection Limit Exceeds RBC
METALS									
Lead	7439-92-1	mg/kg	32 - 32	0.0121 J - 91.2	SM007-TB04-0001	NA		4.0E+02	No
PESTICIDES/HERBICIDES									
Heptachlor	76-44-8	mg/kg	0 - 28	NA		0.09 - 11.7	SM007-TB02-0305	1.3E+00	Max. D.L. > Ind RBC
SEMOVOLATILE ORGANIC COMPOUNDS									
2,4-Dinitrotoluene	121-14-2	mg/kg	8 - 28	0.25 - 1600	SM007-TB06-0001	0.24 - 10.6	SM007-TB02-0305	4.1E+03	No
2,4-Toluenediamine	95-80-7	mg/kg	5 - 28	1.3 - 75.9	SM007-TB06-0305	1.18 - 53.2	SM007-TB02-0305	1.8E+00	Max. Det. & D.L. > Ind RBC
2,6-Dinitrotoluene	606-20-2	mg/kg	5 - 28	0.2 - 380	SM007-TB06-0001	0.13 - 10.6	SM007-TB02-0305	2.0E+03	No
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0 - 28	NA		0.28 - 64.9	SM007-TB02-0305	1.3E+01	Max. D.L. > Ind RBC
Azobenzene	103-33-3	mg/kg	0 - 28	NA		0.13 - 13	SM007-TB06-0001	5.2E+01	No
Benzidine	92-87-5	mg/kg	0 - 28	NA		1.5 - 170	SM007-TB02-0305	2.5E-02	Max. D.L. > Ind RBC
Benzo(a)anthracene	56-55-3	mg/kg	0 - 28	NA		0.13 - 13.8	SM007-TB02-0305	7.8E+00	Max. D.L. > Ind RBC
Benzo(a)pyrene	50-32-8	mg/kg	0 - 28	NA		0.13 - 13	SM007-TB06-0001	7.8E-01	Max. D.L. > Ind RBC
Benzo(b)fluoranthene	205-99-2	mg/kg	0 - 28	NA		0.1 - 11	SM007-TB06-0001	7.8E+00	Max. D.L. > Ind RBC
Benzo(k)fluoranthene	207-08-9	mg/kg	0 - 28	NA		0.14 - 15	SM007-TB06-0001	7.8E+01	No
bis(2-Chloroethyl)ether	111-44-4	mg/kg	0 - 28	NA		0.1 - 11	SM007-TB06-0001	5.2E+00	Max. D.L. > Ind RBC
bis(2-Chloroisopropyl)ether	108-60-1	mg/kg	0 - 28	NA		0.1 - 11	SM007-TB06-0001	8.2E+01	No
Carbazole	86-74-8	mg/kg	0 - 28	NA		0.08 - 53.2	SM007-TB02-0305	2.9E+02	No
Dibenz(a,h)anthracene	53-70-3	mg/kg	0 - 28	NA		0.15 - 16	SM007-TB06-0001	7.8E-01	Max. D.L. > Ind RBC
Hexachlorobenzene	118-74-1	mg/kg	0 - 28	NA		0.16 - 17	SM007-TB06-0001	3.6E+00	Max. D.L. > Ind RBC
Hexachlorobutadiene	87-68-3	mg/kg	0 - 28	NA		0.1 - 11	SM007-TB06-0001	7.3E+01	No
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0 - 28	NA		0.16 - 17	SM007-TB06-0001	7.8E+00	Max. D.L. > Ind RBC
m-toluidine	108-44-1	mg/kg	0 - 28	NA		0.09 - 21.3	SM007-TB02-0305	3.0E+01	No
N-nitrosodibutylamine	924-16-3	mg/kg	0 - 28	NA		0.14 - 15	SM007-TB06-0001	1.1E+00	Max. D.L. > Ind RBC
N-Nitrosodimethylamine	62-75-9	mg/kg	0 - 28	NA		0.1 - 11	SM007-TB06-0001	1.1E-01	Max. D.L. > Ind RBC
n-Nitroso-di-n-propylamine	621-64-7	mg/kg	0 - 28	NA		0.1 - 11	SM007-TB06-0001	8.2E-01	Max. D.L. > Ind RBC
o,p-toluidine	106-49-0	mg/kg	4 - 28	0.11 - 26	SM007-TB06-0001	1.2 - 54.2	SM007-TB02-0305	3.0E+01	Max. D.L. > Ind RBC
Pentachloronitrobenzene	82-68-8	mg/kg	0 - 28	NA		0.08 - 10.6	SM007-TB02-0305	2.2E+01	No
Pentachlorophenol	87-86-5	mg/kg	0 - 28	NA		0.24 - 31	SM007-TB06-0001	4.8E+01	No
VOLATILE ORGANIC COMPOUNDS									
1,2,3-Trichloropropane	96-18-4	mg/kg	0 - 32	NA		0.134 - 1.06	SM007-TB06-0001	8.2E-01	Max. D.L. > Ind RBC
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg	0 - 32	NA		0.257 - 2.11	SM007-TB06-0001	4.1E+00	No
1,2-Dibromoethane	106-93-4	mg/kg	0 - 32	NA		0.134 - 1.06	SM007-TB06-0001	6.7E-02	Max. D.L. > Ind RBC
Acrylonitrile	107-13-1	mg/kg	0 - 32	NA		1.34 - 10.6	SM007-TB06-0001	1.1E+01	No
Benzene	71-43-2	mg/kg	6 - 32	0.138 J - 10.4	J	0.134 - 1.06	SM007-TB06-0001	2.0E+02	No
Vinyl Chloride	75-01-4	mg/kg	0 - 32	NA		0.257 - 2.11	SM007-TB06-0001	3.0E+00	No

¹ Region III Industrial RBCs for Soil (USEPA, Region III, 1999)

NOTE: Only those constituents whose detected concentration or detection limit exceeded the Industrial Soil RBC in the Total Soils Screening are presented here.

TABLE 4.4-7
Screening of Total Soils to Site-Specific Leaching Soil Screening Levels: SWMU Group C

Constituent	CAS Number	Units	Frequency of Detection	Range of Detections	Sample of Maximum Detection	Range of Detection Limits	Sample of Maximum Detection Limit	Site-specific Soil Screening Level ¹	Maximum Detection or Detection Limit Exceeds SSL	
METALS										
Cadmium	7440-43-9	mg/kg	38 - 53	0.00061 - 26.8	SM008-TB01-0305	0.43 - 0.48	SM007-TB06-1517	1.0E+03	No	
Chromium	7440-47-3	mg/kg	53 - 53	0.00453 - 308	SM007-TB07-0001	NA		8.4E+02	No	
Nickel	7440-02-0	mg/kg	53 - 53	0.00761 - 2909	SM007-TB06-0810	NA		8.1E+03	No	
SEMITOLVATILE ORGANIC COMPOUNDS										
1,2-Dichlorobenzene	95-50-1	mg/kg	30 - 44	0.17 - 2120	SM008-TB01-1416	0.24 - 115	SM007-TB02-1416	1.0E+03	Max. Det.>SSL	
1,4-Dichlorobenzene	106-46-7	mg/kg	8 - 44	0.35 - 71.1	SM008-TB01-1416	0.11 - 115	SM007-TB02-1416	1.3E+02	No	
2,4-Dinitrotoluene	121-14-2	mg/kg	15 - 44	0.25 - 6230	SM007-TB02-1416	0.22 - 60.3	SM007-TB04-0709	1.6E+01	Max. Det. & D.L. > SSL	
2,6-Dinitrotoluene	606-20-2	mg/kg	11 - 44	0.2 - 3570	SM007-TB02-1416	0.13 - 60.3	SM007-TB04-0709	6.4E+00	Max. Det. & D.L. > SSL	
Benzo(a)anthracene	56-55-3	mg/kg	1 - 44	26.4 - 26.4	SM007-TB03-1315	0.13 - 149	SM007-TB02-1416	6.0E+01	Max. D.L. >SSL	
Benzo(a)pyrene	50-32-8	mg/kg	1 - 44	14.9 - 14.9	SM007-TB03-1315	0.22 - 115	SM007-TB02-1416	5.4E+02	No	
Benzo(b)fluoranthene	205-99-2	mg/kg	1 - 44	15.2 - 15.2	SM007-TB03-1315	0.1 - 115	SM007-TB02-1416	3.0E+02	No	
n-Nitrosodiphenylamine	86-30-6	mg/kg	2 - 45	14.3 J - 28.8	J	SM008-TB01-1113	0.29 - 149	SM007-TB02-1416	3.1E+01	Max. D.L. >SSL
p-Chloroaniline	106-47-8	mg/kg	18 - 46	0.33 - 268	SM007-TB04-0709	0.1 - 115	SM007-TB02-1416	2.5E+01	Max. Det. & D.L. > SSL	
VOLATILE ORGANIC COMPOUNDS										
Benzene	71-43-2	mg/kg	15 - 53	0.138 J - 313	SM008-TB01-1113	0.134 - 1.67	SM007-TB04-0709	7.8E-01	Max. Det. & D.L. > SSL	
Carbon tetrachloride	56-23-5	mg/kg	1 - 53	0.81 - 0.81	SM011-TB01-0001	0.134 - 2.93	SM008-TB01-1416	1.7E+00	Max. D.L. >SSL	
Chlorobenzene	108-90-7	mg/kg	46 - 53	0.139 J - 1620	SM008-TB01-1113	0.143 - 0.155	SM007-TB05-1618	1.6E+01	Max. Det.>SSL	
Methylene chloride	75-09-2	mg/kg	1 - 53	4.64 J - 4.64	J	SM008-TB01-1113	0.257 - 5.87	SM008-TB01-1416	3.9E-01	Max. Det. & D.L. > SSL
Tetrachloroethene	127-18-4	mg/kg	1 - 53	0.574 J - 0.574	J	SM007-TB02-0305	0.134 - 2.93	SM008-TB01-1416	1.6E+00	Max. D.L. >SSL
Toluene	108-88-3	mg/kg	16 - 53	0.14 J - 1400	SM008-TB01-1113	0.134 - 0.164	SM007-TB06-0810	5.8E+02	Max. Det.>SSL	
Trichloroethene	79-01-6	mg/kg	5 - 53	0.218 J - 1.35	SM007-TB08-1517	0.134 - 2.93	SM008-TB01-1416	1.7E+00	Max. D.L. >SSL	

¹ Soil Screening Levels calculated as per USEPA SSL Guidance (1996); see Appendix F-2

NOTE: Only those constituents whose detected concentration exceeded the USEPA SSL are presented here.

TABLE 4.4-8
Exposure Point Concentrations for Constituents of Interest
SWMU Group C

Depth Interval	Constituent of Interest	Maximum Detected Concentration mg/kg	Distribution	95% UCL mg/kg	EPC mg/kg
0-2 feet	2,4-Toluenediamine	69.6	Assume Lognormal	15.6	15.6
0-5 feet	2,4-Toluenediamine	75.9	Assume Lognormal	23.9	23.9

TABLE 4.4-9

Industrial and Construction Worker Scenario
Risk Summary
SWMU Group C

Constituent of Interest	Ingestion	Dermal	Inhalation of Particulates	Inhalation of Volatiles	TOTAL RISK
Summary of Theoretical Excess Lifetime Cancer Risks					
Industrial Workers					
2,4-Toluenediamine	8.72E-06	1.05E-05	5.29E-09	--	1.92E-05
TOTAL	8.72E-06	1.05E-05	5.29E-09	--	1.92E-05
Construction Workers					
2,4-Toluenediamine	2.67E-06	1.11E-06	1.68E-10	--	3.78E-06
TOTAL	2.67E-06	1.11E-06	1.68E-10	--	3.78E-06

Note: Non-cancer Hazard Indices were not calculated as the COI was not defined as non-carcinogenic.

4.5 SWMU GROUP D: SWMUs 10, 12, 15, AND 16

SWMU Group D consists of SWMU 10: Infilled Wastewater Trench-Former Process Trench, SWMU 12: Former Neutralization Spill Basin, SWMU 15: Neutralization and Settling Basins 5Fa, and SWMU 16 Neutralization Basin 5Fe. These units were combined because SWMUs 12, 15, and 16 were units within SWMU 10.

SWMU 10: Infilled Wastewater Trench - Former Process Trench

The infilled wastewater ditch was originally a natural streambed, which flowed north to south through the facility. Feeder trenches were dug to direct runoff and spills throughout the facility into the wastewater ditch. Neutralization units and basins (SWMUs 12, 15, and 16) were incorporated in the feeder trenches and the main ditch to provide treatment of wastewater prior to discharge. In the early 1970s, Bayer (then called Mobay) graded the streambed. The present-day process trench (SWMU 13) replaced this unit during the 1970s.

The infilled or former process trench passes through or contains several SWMUs included in the RFI (SWMUs 4, 5, 6, 7, 9, 11, 12, 13, 15, and 16). A hydrochloric acid neutralization unit between Blocks 12 and 22 and a weir drain were located within the main wastewater ditch. The neutralization unit was a 12 feet square, 15 feet deep structure lined with green oak planks. The neutralization unit used crushed limestone to treat wastewater. Based on available information, the weir drain was a sump that was part of the main process trench located between Blocks 11 and 21.

SWMU 12: Former Neutralization Spill Basin

SWMU 12 (Former Neutralization Spill Basin) was located on the eastern side of Block 22. The basin was an unlined earthen impoundment 30 ft by 100 ft by 17 ft deep with a capacity of approximately 380,000 gallons. The unit was in operation from 1972 to 1980, when it was backfilled and covered with crushed stone. Wastes which may have been handled at this unit include numerous VOCs, SVOCs, and possibly TDI residue. This unit is located within SWMU 10 - Infilled Wastewater Ditch.

SWMU 15: Neutralization And Settling Basins 5Fa

SWMU 15 (Neutralization and Settling Basins 5Fa) consists of two separate, small, former basins located on the southeastern side of Block 14. The settling basin was constructed in 1955 and the neutralization basin was known to be in operation in 1962. Both units are believed to have been closed between 1968 and 1970. Available information indicates that the settling basin

was 10 ft x 30 ft by an unknown depth, and that both basins were unlined. Acidic wastewater from the HCL production area was treated here by neutralization with limestone and then directed to the main process effluent trench. Closure of the units consisted of backfilling the basins.

SWMU 16: Neutralization Basin 5Fe

SWMU 16 (Neutralization Basin 5Fe) was formerly located in the northeastern corner of Block 24. Constructed in the early 1970s and operated through the mid 1970s, the 12 ft x 12 ft x 15 ft deep basin, lined with green oak planks, neutralized hydrochloric acid with crushed limestone. The basin was backfilled some time after 1986. SWMU 16 is contained within SWMU 10.

4.5.1 Summary: RFI Scope of Work

The RFI scope of work consisted of soil gas and limited GPR surveys performed during Phase 1 and soil sampling performed during Phases 2 and 3.

4.5.1.1 Phase 1 Scope of Work

The Phase 1 scope of work at SWMU Group D included a soil gas survey and a GPR survey.

Soil Gas Survey

The soil gas survey at SWMU Group D focused on SWMU 10 and was inclusive of SWMUs 12, 15, and 16. The soil gas survey points in SWMU 10 are shown on Figures C-5 through C-10 of Appendix C. Total VOC concentrations in soil gas are considered elevated if found above 100 µg/L. This is considered to be a conservative cut-off value and was derived after several years of comparing actual analytical soil chemistry results with soil gas results. Elevated VOC concentrations were observed at numerous locations within and immediately adjacent to this SWMU group.

The primary constituents identified during the soil gas survey are: chlorobenzene (maximum detected concentration of 6,316 µg/L), benzene (maximum detected concentration of 2,870 µg/L), hydrocarbons (maximum detected concentration of 563 µg/L), freon 141b (maximum detected concentration of 44,900 µg/L), freon 11 (maximum detected concentration of 2,300 µg/L), and toluene (maximum detected concentration of 4,012 µg/L).

Ground Penetrating Radar Survey

Several GPR traverses were conducted at various locations in an attempt to assess the location of SWMU 10 (Infilled Wastewater Ditch/Former Process Trench). Traverses from 100 to 200 feet long were conducted along roads and between buildings in open areas. SWMU 10 is a very subtle geophysical target and was not detected along any of the GPR traverses. In general, the fill material used to grade the site has very heterogeneous characteristics that mask the possible detection of the SWMU. Reflections from disturbed material, subsurface structures, and the heterogeneous nature of the fill precluded the detection of SWMU 10. Approximately 3,000 linear feet of data along 15 GPR traverses were collected during the investigation for SWMU 10. The GPR investigation of SWMU 10 was judged to be ineffective by the field geophysicist.

GPR traverses were conducted in Block 14 and along adjacent roads to assess the location of SWMU 15. The only anomalous characteristics that occur in the GPR data are located north of 13th Street, along the north-south walkway. Reflection patterns typical of fill or disturbed material may occur from 13th Street to approximately 60 feet to the north. The data along this traverse are not conclusive. As such, no figure is provided.

4.5.1.2 Phase 2 Scope of Work

The Phase 2 scope of work was performed on a SWMU basis. The scope of work for Phase 2 was based on the findings of the previous investigation work and on the Work Plan.

SWMU 10 Scope of Work

Twenty-one test borings were installed for the purposes of collecting samples for laboratory and geotechnical analysis for the former process trench. However, several SWMUs also have soil borings within or very near SWMU 10 boundaries (SWMUs 4, 5, 6, 7, 9, 11, 12, 13, 15, and 16). Test borings in SWMU 10 were drilled to depths ranging from 10.5 to 25 ft-bgs, with the majority of the borings reaching 21 ft-bgs. Samples were collected from each boring at the surface (0 to 1 or 2 ft-bgs) and the shallow subsurface (3 to 5 ft-bgs). Additional samples were taken from areas with elevated OVM readings and the two-foot interval above groundwater.

Additional samples were collected from SM010-TB07, -TB09, -TB11, -TB12, -TB20, and -TB21 where field screening with the OVM indicated the presence of organic vapors at elevated concentrations. The samples were submitted for analysis of SVOCs, metals, VOCs, and TOCs.

Table 4.5-1 presents the complete soil analytical results for SWMU Group D (including SWMU 10) and Figure 4.5-1 provides selected soil analytical results on a plan view map.

Shelby Tube samples for geotechnical analysis were collected from twin borings drilled beside SM010-TB02, -TB05, -TB08, -TB11, -TB14, -TB17, and -TB20. Sieve and hydrometer, as well as bulk density analyses were performed on the 1 to 3 ft-bgs samples from SM010-TB02, -TB05, -TB14, and -TB17, and on the 0.5 to 2.5 ft-bgs interval for the remaining borings. Sieve and hydrometer, moisture content, bulk density, and permeability analyses were performed on samples from various intervals in all the borings listed above.

Samples from SM010-TB01 were taken from 0 to 2.5, and from 5 to 7 ft-bgs. The 0 to 2.5 ft-bgs sample was marked for sieve and hydrometer analysis and the 5 to 7 ft-bgs sample was marked for sieve and hydrometer, moisture content, bulk density, and permeability analyses.

SWMU 12

Borings SM012-TB01 through SM012-TB03 were all drilled to 17 ft-bgs. Samples for laboratory analysis were collected from each boring at the surface (0 to 1 ft-bgs) and the shallow subsurface (3 to 5 ft-bgs). Wet to saturated conditions were found at 3 ft-bgs in -TB01 and extended to the depth of the boring. Additional samples were collected from -TB01 in the 7 to 9, 11 to 13, and 13 to 17 ft-bgs intervals due to elevated OVM readings (178, 498, and >1999 ppm, respectively). Wet to saturated conditions were found at 3 ft-bgs in -TB02 and extended to the depth of the boring. One additional sample was collected from -TB02 in the 9 to 13 ft-bgs interval due to elevated OVM readings (>1999 ppm). The alluvial aquifer was found at 16.7 ft-bgs in boring -TB03 and a sample was collected from 15 to 16.7 ft-bgs. One additional sample was collected from -TB03 in the 11 to 13 ft-bgs interval due to elevated OVM readings (>1999 ppm). The samples were submitted for analysis of SVOCs, metals, VOCs and TOC. Table 4.5-1 presents the complete soil analytical results for SWMU Group D (including SWMU 12) and Figure 4.5-1 provides selected soil analytical results on a plan view map.

Shelby Tube samples for geotechnical analysis were collected from a twin boring drilled beside SM012-TB02. Samples from the 2 to 4 and 11 to 13 ft-bgs intervals were collected and marked for sieve, hydrometer, bulk density, moisture content, and permeability analyses.

SWMU 15

Two borings, SM015-TB01 and -TB02, were drilled to 25 ft-bgs, boring SM015-TB03 was drilled to 21 ft-bgs, and SM015-TB04 was drilled to 20 ft-bgs. Samples for laboratory analysis were collected from each of the four borings at the surface (0 to 1 ft-bgs or immediately beneath the asphalt pavement) and the shallow subsurface (3 to 5 ft-bgs).

In boring SM015-TB01, the alluvial aquifer was reached at 20.8 ft-bgs and a sample was collected from 18.8 to 20.8 ft-bgs. One additional sample was taken in the 7 to 9 ft-bgs interval due to a perched water zone.

In boring SM015-TB02, elevated OVM readings were detected in the 0 to 5 ft-bgs interval, which were covered by samples SM015-TB02-0001 (28.9 ppm) and -0305 (138 ppm). Elevated OVM readings were also found in the sample collected from 13 to 15 ft-bgs. The alluvial aquifer was reached at 21 ft-bgs and a sample was collected from 19 to 21 ft-bgs (OVM reading 13.6 ppm).

In boring SM015-TB03, low concentrations of organic vapors were detected in the 0 to 5 ft-bgs interval, which were covered by samples SM015-TB03-0001 (16.8 ppm) and -0305 (18 ppm). Elevated OVM readings were also found in the 5 to 9 (115.8 ppm), 9 to 13, 13 to 17, and 17 to 21 ft-bgs intervals (all >1,999 ppm) and samples were collected as appropriate. The alluvial aquifer was reached at 19.7 ft-bgs and a sample was collected from 17.7 to 19.7 ft-bgs (OVM reading >1999 ppm).

Boring SM015-TB04, also had low concentrations of organic vapors in the 0 to 1 and 4 to 8 ft-bgs intervals, which were covered by samples SM015-TB03-0001 (11 ppm) and -0508 (29 ppm). The alluvial aquifer was reached at 19.7 ft-bgs and a sample was collected from 17.7 to 19.7 ft-bgs (OVM reading 148 ppm).

The samples were submitted for analysis of SVOCs, metals, VOCs and TOCs. Table 4.5-1 presents the complete soil analytical results for SWMU Group D (including SWMU 15) and Figure 4.5-1 provides selected soil analytical results on a plan view map.

Shelby Tube samples for geotechnical analysis were collected from a twin boring drilled beside SM015-TB02. A sample marked for sieve, hydrometer, and bulk density analyses was taken

from the 0.5 to 2.5 ft-bgs interval. Samples for sieve, hydrometer, bulk density, moisture content, and permeability analyses were taken from the 3 to 5 and 13 to 15 ft-bgs intervals.

SWMU 16

Boring SM016-TB01 was drilled to 21 ft-bgs. Samples for laboratory analysis were collected at the surface (0 to 1 ft-bgs), the shallow subsurface (3 to 5 ft-bgs) and the 2-ft interval above the alluvial aquifer (18 to 20 ft-bgs). Additional samples were collected from 7 to 9 ft-bgs due to a perched water zone and slightly elevated OVM readings (1.7 ppm) and from 15 to 17 ft-bgs due to elevated OVM readings (78.3 ppm). The samples were submitted for analysis of SVOCs, metals, VOCs and TOCs. Table 4.5-1 presents the complete soil analytical results for SWMU Group D (including SWMU 16) and Figure 4.5-1 provides selected soil analytical results on a plan view map.

Shelby Tube samples for geotechnical analysis were collected from a twin boring drilled beside SM016-TB01. Samples were taken from the 3 to 5 and 15 to 17 ft-bgs intervals and marked for sieve, hydrometer, and bulk density analyses.

4.5.1.3 Phase 3 Scope of Work

The Phase 3 scope of work was based on the results of the Phase 2 investigation and discussion with USEPA. The scope included resampling and analysis of the following Phase 2 samples: SM010-TB01 (0-1 and 3-5 ft-bgs), SM010-TB04 (3-5 ft-bgs), SM010-TB05 (3-5 and 7-9 ft-bgs), SM010-TB06 (3-5 and 7-9 ft-bgs), SM010-TB10 (0-1 ft-bgs), SM010-TB11 (6-8 ft-bgs), and SM012-TB01 (0-1, 3-5, and 7-9 ft-bgs). One soil sample (SM012-TB02, 9-13 ft-bgs) could not be sampled because this interval was saturated and adequate sample volume could not be recovered. These samples were analyzed for SVOCs.

Additionally samples were collected from 4 new boring locations: SM010-TB22, SM010-TB23, SM010-TB24, and SM010-TB25. Samples for laboratory analysis were collected at the surface (0 to 1 ft-bgs), the shallow subsurface (3 to 5 ft-bgs) and the 2-ft interval above groundwater. Samples were also to be taken from areas with elevated OVM readings; however, none were encountered. The samples were submitted for analysis of VOCs, SVOCs, and metals.

4.5.2 Field Observations

The boring logs for SWMU 10 (Appendix D) indicate that subsurface materials primarily consist of gravel, sand, sandy silts, silty to sandy clays. TDI residue and other wastes were identified in 5 isolated borings. Table 4.5-2 summarizes the field observations for the test borings in SWMU Group D. The field observations are discussed on an individual SWMU basis in the following sections.

SWMU 10

Test Borings SM010-TB04, -TB05, -TB10, -TB11, -TB12, -TB17, and -TB18 were drilled through asphalt into a gravel subbase typically 0.5 to 2.5 feet thick. All other borings were drilled through gravel prior to encountering dark gray to brown sands and sandy silts as well as brown silty to sandy clays. The sediments were used as fill material and vary in thickness and vertical sequence.

TDI residue was observed in SM010-TB01 near SWMU 5 in the southern portion of the site from 7.5 to 19.5 ft-bgs. Other types of waste encountered at SWMU 10 include crushed concrete in boring SM010-TB12 from 10 to 10.5 ft-bgs and a golden brown liquid product in SM010-TB20 from 16.5 to 16.8 ft-bgs. The golden brown product in SM010-TB20 had elevated levels of organic vapors that registered 438 ppm on the OVM.

Ten test borings (SM010-TB02, -TB03, -TB05, -TB06, -TB07, -TB08, -TB11, -TB15, -TB17, and -TB18) encountered perched groundwater between 7 and 13 ft-bgs (Table 4.5-2). All test borings, with the exception of SM010-TB06 and SM010-TB12, encountered the alluvial aquifer. Test Boring SM010-TB06 met refusal at 13 ft-bgs and SM010-TB12 met refusal at 10.5 ft-bgs

The borings installed during Phase 3 (SM010-TB22, -TB23, -TB24, and TB25) encountered similar subsurface materials as described above, with the exception of the boring SM010-TB-22 which encountered TDI residue from 5.5 to 12 ft-bgs. Perched water was not encountered in these borings.

SWMU 12

The boring logs for SWMU 12 (Appendix D) indicate that subsurface materials encountered during Phase 2 in boring SM012-TB01 are 2.5 ft of crushed stone, gravel, and sand, followed by sandy clay to depth. Materials encountered in SM012-TB02 are very similar; 3 ft of crushed

stone, gravel, and sand, followed by sandy clay to 13 ft-bgs. There was no recovery in the 13 to 17 ft-bgs interval. Materials encountered in SM012-TB03 are 1 ft of crushed stone and sandy silt followed by silty clay to 5 ft-bgs, sandy silt to 9 ft-bgs, sandy clay to 12 ft-bgs, TDI residue to 12.5 ft-bgs, and sandy clay to depth. An unidentified brown product was found smeared in the geoprobe sampler in the 13 to 17 ft-bgs interval.

SWMU 15

The boring logs for SWMU 15 (Appendix D) indicate that subsurface materials encountered during Phase 2 in boring SM015-TB01 are 0.5 ft of crushed stone fill above fine to coarse sand to 9 ft-bgs, clayey silt to 21 ft-bgs, and fine to medium sand to depth. The alluvial aquifer was reached at 20.8 ft-bgs.

Materials encountered in SM015-TB02 were 0.5-ft of asphalt pavement above gravelly clay to 8 ft-bgs, shaley siltstone to 13 ft-bgs, clayey sand to 21 ft-bgs, and fine to coarse sand to depth. The alluvial aquifer was reached at 21 ft-bgs. Elevated levels of organic vapors were detected in the 0 to 5 (max 138 ppm), 9 to 13 (1.7 ppm), 13 to 17 (148 ppm), 17 to 21 (13.6 ppm), and 21 to 25 ft-bgs intervals (1.2 ppm).

Materials encountered in boring SM015-TB03 are 5 ft of gravel with fine to coarse sand fill above gravelly clay to 6 ft-bgs, clayey sand to 19 ft-bgs, and fine to medium sand to depth. The alluvial aquifer was reached at 19.7 ft-bgs. Elevated levels of organic vapors were detected in the 0 to 1 ft-bgs (16.8 ppm), the 3 to 5 ft-bgs (18 ppm), the 5 to 9 ft-bgs (115.8 ppm), the 9 to 13 ft-bgs, the 13 to 17 ft-bgs, and the 17 to 21 ft-bgs intervals (all >1,999 ppm).

Materials encountered in boring SM015-TB04 are 4 ft of sand with fine to medium gravel fill above clayey sand to 19.7 ft-bgs and fine to medium sand to depth. Note that all thicknesses and depths are approximate. The alluvial aquifer was reached at 19.7 ft-bgs. Elevated levels of organic vapors were detected in the 0 to 1 ft-bgs (11 ppm), the 5 to 8 ft-bgs (29 ppm), and the 2-foot interval above groundwater, 17.7 to 19.7 ft-bgs (148 ppm).

SWMU 16

The boring log for SWMU 16 (Appendix D) indicates that subsurface materials encountered during Phase 2 in boring SM016-TB01 are 2 ft of crushed stone, fine gravel, and fine to coarse sand followed by sandy clay/clayey sand to 17 ft-bgs, and fine to medium sand to depth.

The alluvial aquifer was reached at 20.0 ft-bgs. Organic vapors were detected in the 5 to 9 (1.7 ppm), 9 to 13 (0.8 ppm), 13 to 17 (78.3 ppm), and 17 to 21 ft-bgs intervals (231 ppm).

4.5.3 Risk Assessment

Table 4.5-1 provides complete analytical results for SWMU Group D. Table 4.5-3 and Table 4.5-4 present a summary of the constituents screened in soil at all depths respectively at SWMU Group D. The screening tables identify constituents with detections and/or detection limits exceeding either the Region III industrial and residential RBCs or the USEPA SSLs. The maximum detected concentrations, the maximum detection limits, the frequency of detection, and a comparison of the detected concentrations and detection limits to the screening criteria are also presented in Table 4.5-3 and 4.5-4.

4.5.3.1 Comparison to Risk Based Criteria

As indicated on Table 4.5-4, there are eight organics with maximum detected concentrations exceeding the Region III RBCs for industrial soil and twenty-eight organics with maximum detection limits exceeding the Region III RBCs for industrial soil. Additionally, there are seventeen organics and two inorganics with maximum detected concentrations exceeding the Region III RBCs for residential soil and fifty-seven organics with maximum detection limits exceeding the Region III RBCs for residential soil.

USEPA SSLs were compared to maximum detected concentrations and maximum detection limits in soils at all depths in Table 4.5-4. As indicated on the table, there are fifteen organics and four inorganics with maximum detected concentrations exceeding the USEPA SSLs. Additionally, there are sixty-five organics with maximum detection limits exceeding the USEPA SSLs. All constituents whose maximum detected concentrations exceed the USEPA SSL were evaluated further in a comparison to site-specific SSLs. This comparison is discussed in Section 4.5.3.2.

All constituents whose maximum detected concentrations or maximum detection limit exceeds the Region III RBC for industrial soil were evaluated separately in the screening risk-assessments for the 0-2 feet and the 0-5 feet soil depth intervals. These screening assessments are discussed below and are presented in Tables 4.5-5 and 4.5-6 respectively.

As indicated on Table 4.5-5, no constituents were detected at a concentration that exceeded the Region III RBCs for industrial soil at 0-2 feet in depth. Sixteen constituents had detection limits that exceeded the Region III RBCs for industrial soil at 0-2 feet in depth. As indicated on Table 4.5-6, five constituents (2,4-toluenediamine, o,p-toluidine, m-toluidine, benzene, and aniline) were detected at a concentration exceeding the Region III RBC for industrial soil at 0-5 feet in depth. Eighteen constituents had detection limits that exceeded the Region III RBCs for industrial soil at 0-5 feet in depth.

In general, detection limits that exceeded respective Region III Industrial Soil RBCs were elevated, as identified in samples SM10-TB04-001, SM10-TB06-001, and SM10-TB18-001 for 0-2 feet soil and in samples SM12-TB02-0305 and SM10-TB10-0305 for 0-5 feet soil. Exceptions were the non-elevated detection limits of benzidine and 1,2-dibromoethane, which exceeded their respective Region III Industrial Soil RBCs in 0-2 feet and 0-5 feet soils.

Constituents of Interest include 2,4-toluenediamine, o,p-toluidine, m-toluidine, benzene, and aniline. These constituents were identified as COI for the 0-5 feet interval based on the maximum detections exceeding the respective Region III RBC. These COIs are evaluated further in the risk assessment because they are related to processes at the Bayer New Martinsville facility. Frequencies of detection for these five COIs were approximately 4 to 5 percent for 2,4-toluenediamine, o,p- and m-toluidine and were approximately 23-24 percent for aniline and benzene. The three infrequently detected COIs (i.e., 5 percent or less) were retained for the risk assessment because they are process related.

Several constituents in both the 0-2 feet depth interval and the 0-5 feet depth interval had detection limits that exceeded their respective Region III RBC for industrial soil. These constituents were not identified as COIs and are not evaluated further in the risk assessment. Of these constituents, 1,2-dibromoethane, 1,2,3-trichloropropane, hexachlorobenzene, dibenz(a,h)anthracene, n-nitroso-dibutylamine, n-nitroso-di-n-propylamine, n-nitroso-dimethylamine, heptachlor, acrylonitrile, and benzidine were not detected at the SWMU Group and they were not detected at any depth in any soils site-wide. These constituents are not related to any process at the Bayer New Martinsville facility (Bayer, 2000). The remaining constituents (3,3'-dichlorobenzidine, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, bis(2-chloroethyl)ether and indeno(1,2,3-cd)pyrene) were detected at least once in site-wide soils at any depth, and their detection limits at SWMU Group D exceed their respective Region III RBCs. These constituents, however, were not identified as COIs because their exceedences were

based on elevated detection limits. Discussion of these constituents is deferred to the uncertainty discussion in Appendix F-1, SWMU-specific Uncertainties.

4.5.3.2 Site-Specific Soil Screening Levels

The potential for leaching from soil to groundwater at this SWMU Group is further evaluated using site-specific SSLs.

Site-specific SSLs were derived for SWMUs 10, 12, 15, and 16 in Phase 2 using site-specific data. SSLs were calculated to further evaluate if the constituents detected within the unsaturated zone at levels exceeding the USEPA SSLs could potentially migrate to groundwater at concentrations of concern. Site-specific SSLs were calculated for each constituent whose maximum detection exceeded the USEPA SSL. The most conservative site-specific SSL for the individual SWMUs was assumed as the site-specific SSL for the entire SWMU Group. The maximum detected concentration of each constituent was then compared to the site-specific SWMU Group SSL. Site-specific SSLs for the SWMU Group are presented in Table 3.2-2.

Table 4.5-7 presents a comparison between the calculated SSLs and the maximum detected concentrations of those constituents that exceed the USEPA SSL in soils at all depths. Three inorganics and thirteen organics have maximum detected concentrations that exceed the site-specific SSLs.

4.5.3.3 Exposure Assessment

Exposure point concentrations used for SWMU Group D COIs are presented in Table 4.5-8. The EPCs for the five COIs in 0-5 foot soils are as follows: aniline (17.8 mg/kg); benzene (0.932 mg/kg); o,p-toluidine (15.0 mg/kg); m-toluidine (4.0 mg/kg); and 2,4-toluenediamine (8.7 mg/kg). These distributions were assumed to be lognormal as the data distributions were undefined, except for m-toluidine that had a lognormal distribution. These concentrations were calculated using the equations in Section 3.2.3 and appropriate exposure parameters for the receptors evaluated.

4.5.3.4 Exposure Risk Assessment Results

Table 4.5-9 provides a summary of the theoretical excess lifetime cancer risks and noncancer hazards for the construction worker receptor. No risks or hazards were calculated for the industrial worker because no COIs were identified in 0-2 foot soils. The total cancer risk for the

construction worker receptor is 1.6×10^{-6} , which is within the acceptable range of 1×10^{-4} to 1×10^{-6} for human health risk established by the USEPA. The total noncancer hazard index for the construction worker is 0.01 and is not above USEPA's target noncancer hazard index threshold of 1. Given that these risks and hazards are acceptable, no refined receptor evaluation was necessary, as discussed in Section 3.2.3.

4.5.4 Discussions with USEPA

SWMU Group D was discussed with USEPA on March 24, 1999, May 19, 1999, and August 25 2000. The March 24 and May 19, 1999 discussions were completed after submittal of the Phase 2 Report and resulted in SWMUs 10, 12, 15, and 16 being grouped into SWMU Group D. The discussions indicated that SWMU Group D should be evaluated further and resulted in the Phase 3 sampling program. USEPA agreed that resampling was necessary only for the following locations: SM010-TB01 (0-1 and 3-5 ft-bgs), - TBO4 (3-5 ft-bgs), - TBO5 (3-5 and 7-9 ft bgs), -TB06 (3-5 and 7-9), - TB10 (0-1 ft-bgs, metals only), SM012-TB01 (0-1, 3-5, and 7-9 ft bgs) and -TB02 (9-13 ft. bgs).

The August 25, 2000 discussion of SWMU Group D was conducted after the initial submittal of the Final RFI Report. During this discussion USEPA agreed with the conclusions and recommendations presented; however, USEPA requested that SWMU Group D also be included in a soil management plan as a source reduction measure.

Based on the Final RFI report and the subsequent discussions, USEPA concurred with the conclusion and recommendations for SWMU Group D presented in Section 4.5.5: 1) no further action based on exposure risk, 2) inclusion in the facility's institutional control plan covering subsurface work, and 3) further evaluation as a potential source area during the completion of the sitewide groundwater CMS. As recommended by USEPA, SWMU Group D will also be listed as a soil management area in the institutional control plan as part of a source reduction strategy. More specifically, soils excavated as part of routine construction work within the soil management area will be tested and disposed as appropriate.

4.5.5 Conclusions and Recommendations

Based on the exposure risk assessment results, no further action is warranted at SWMU Group D. This conclusion is based on the calculated risks for industrial and construction worker scenarios which are within the acceptable range defined by USEPA. Additionally, no

constituents exceeded the USEPA Region III industrial RBCs in surface soil (0-2 ft-bgs). Four constituents (2,4-toluenediamine, o,p-toluidine, m-toluidine, benzene, and aniline) exceeded the USEPA Region III industrial RBCs in shallow soil (0-5 ft-bgs); however, the detailed risk assessment indicated that the risks under the excavation/construction worker scenario are within the acceptable range as defined by USEPA. However because several constituents exceed the industrial RBCs, Bayer will include SWMU Group D in the facility's institutional control plan for worker safety while performing subsurface work. Additionally, SWMU Group D will also be subject to a soil management plan as recommended for source control during discussions with USEPA.

Three inorganics (cadmium, chromium, and nickel) and twelve organics (1,1-dichloroethene, benzene, chlorobenzene, methylene, toluene, trichloroethene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 2,4-dinitrotoluene, 2,6-dinitrotoluene, bis(2-chloroethyl)ether, nitrobenzene, and p-chloraniline) exceeded the site-specific SSLs. Comparison of maximum detected values to the site-specific SSLs indicates a potential for constituents to leach to groundwater at potentially unacceptable concentrations. Bayer performs quarterly groundwater monitoring in accordance with a USEPA-approved groundwater monitoring plan. The objective of the groundwater monitoring plan is to ensure that potentially impacted groundwater is captured by on-site recovery wells. The groundwater monitoring has been performed at the facility since 1986 and has consistently shown on-site capture of groundwater by the site's pumping wells.

Although no further action is recommended for SWMU Group D based on the exposure assessment, the potential for constituents to leach to groundwater is a potential concern. Therefore, SWMU Group D will be evaluated as a potential source area for constituents in groundwater and further action, if necessary, will be evaluated as part of a CMS for groundwater.

Table 4.5-1
Chemical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB01-0001 0.00-1.00 TB01 6/18/1997	SM010-TB01-0001 0.00-1.00 TB01 11/12/1999	SM010-TB01-0305 3.00-5.00 TB01 6/18/1997	SM010-TB01-0305RS 3.00-5.00 TB01 7/18/1997	SM010-TB01-0305 3.00-5.00 TB01 11/12/1999	SM010-TB01-1113 11.00-13.00 TB01 6/18/1997	SM010-TB02-0001 0.00-1.00 TB02 6/18/1997	SM010-TB02-0305 3.00-5.00 TB02 6/18/1997	SM010-TB02-0305RS 3.00-5.00 TB02 7/18/1997	SM010-TB02-0507 5.00-7.00 TB02 6/18/1997
PARAMETER										
Volatiles (µg/kg)										
1,1,1,2-Tetrachloroethane	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
1,1,1-Trichloroethane	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
1,1,2,2-Tetrachloroethane	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
1,1,2-Trichloroethane	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
1,1-Dichloroethane	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
1,1-Dichloroethene	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
1,1-Dichloropropene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
1,2,3-Trichlorobenzene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
1,2,3-Trichloropropane	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
1,2,4-Trichlorobenzene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
1,2,4-Trimethylbenzene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
1,2-Dibromo-3-chloropropane	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
1,2-Dibromoethane	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
1,2-Dichlorobenzene	314 J	NA	14900	NA	NA	82300	< 282	348 J	NA	< 292
1,2-Dichloroethane	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
1,2-Dichloropropane	< 442	NA	< 437	NA	NA	< 4740	< 429	< 441	NA	< 444
1,3,5-Trimethylbenzene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
1,3-Dichlorobenzene	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
1,3-Dichloropropane	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
1,4-Dichlorobenzene	< 291	NA	862	NA	NA	< 3120	< 282	< 290	NA	< 292
2,2-Dichloropropane	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
2-Butanone (MEK)	< 1020	NA	< 1010	NA	NA	< 11000	< 993	< 1020	NA	< 1030
2-Chloroethyl Vinyl Ether	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
2-Chlorotoluene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
2-Hexanone	< 442	NA	< 437	NA	NA	< 4740	< 429	< 441	NA	< 444
4-Chlorotoluene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
4-Methyl-2-pentanone (MIK)	< 442	NA	< 437	NA	NA	< 4740	< 429	< 441	NA	< 444
Acetone	< 1020	NA	< 1010	NA	NA	< 11000	< 993	< 1020	NA	< 1030
Acrolein	< 2910	NA	< 2870	NA	NA	< 31200	< 2820	< 2900	NA	< 2920
Acrylonitrile	< 1510	NA	< 1490	NA	NA	< 16200	< 1470	< 1510	NA	< 1520
Allyl Chloride	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Benzene	< 151	NA	< 149	NA	NA	2120 J	< 147	< 151	NA	< 152
Bromobenzene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Bromochloromethane	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Bromodichloromethane	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
Bromoform	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Bromomethane	< 442	NA	< 437	NA	NA	< 4740	< 429	< 441	NA	< 444
Carbon Disulfide	< 442	NA	< 437	NA	NA	< 4740	< 429	< 441	NA	< 444
Carbon Tetrachloride	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Chlorobenzene	< 151	NA	11100	NA	NA	162000	< 147	< 151	NA	187 J
Chloroethane	< 442	NA	< 437	NA	NA	< 4740	< 429	< 441	NA	< 444
Chloroform	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Chloromethane	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
Dibromochloromethane	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Dibromomethane	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Dichlorodifluoromethane	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
Ethyl Methacrylate	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Ethylbenzene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Freon 113	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
Freon 141b	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Hexachlorobutadiene	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
Isopropylbenzene	< 442	NA	< 437	NA	NA	< 4740	< 429	< 441	NA	< 444
Methyl Iodide	< 442	NA	< 437	NA	NA	< 4740	< 429	< 441	NA	< 444
Methylene Chloride	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB01-0001 0.00-1.00 TB01 6/18/1997	SM010-TB01-0001 0.00-1.00 TB01 11/12/1999	SM010-TB01-0305 3.00-5.00 TB01 6/18/1997	SM010-TB01-0305RS 3.00-5.00 TB01 7/18/1997	SM010-TB01-0305 3.00-5.00 TB01 11/12/1999	SM010-TB01-1113 11.00-13.00 TB01 6/18/1997	SM010-TB02-0001 0.00-1.00 TB02 6/18/1997	SM010-TB02-0305 3.00-5.00 TB02 6/18/1997	SM010-TB02-0305RS 3.00-5.00 TB02 7/18/1997	SM010-TB02-0507 5.00-7.00 TB02 6/18/1997
PARAMETER										
Naphthalene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Styrene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Tetrachloroethene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Toluene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Trichloroethene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
Trichlorofluoromethane	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
Vinyl Acetate	< 442	NA	< 437	NA	NA	< 4740	< 429	< 441	NA	< 444
Vinyl Chloride	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
cis-1,2-Dichloroethene	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
cis-1,3-Dichloropropene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
m+p-Xylene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
n-Butylbenzene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
n-Propylbenzene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
o-Xylene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
p-Isopropyltoluene	< 151	NA	908	NA	NA	11300	< 147	< 151	NA	< 152
sec-Butylbenzene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
tert-Butylbenzene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
trans-1,2-Dichloroethene	< 291	NA	< 287	NA	NA	< 3120	< 282	< 290	NA	< 292
trans-1,3-Dichloropropene	< 151	NA	< 149	NA	NA	< 1620	< 147	< 151	NA	< 152
trans-1,4-Dichloro-2-butene	< 1510	NA	< 1490	NA	NA	< 16200	< 1470	< 1510	NA	< 1520
Semivolatiles (µg/kg)										
1,2,3-Trichlorobenzene	R	<120	< 280 J	<1320	<1200	< 15000	< 540	NA	< 280	< 280
1,2,4,5-Tetrachlorobenzene	R	<130	< 280 J	<1320	<130	< 15000	< 540	NA	< 280	< 280
1,2,4-Trichlorobenzene	R	<120	< 230 J	<1100	<120	< 12500	< 450	NA	< 230	< 230
1,2-Dichlorobenzene	R	460	38900 J	15510	150000	46500	< 450	NA	370	590
1,3-Dichlorobenzene	R	<940	< 230 J	<1100	<960	< 12500	< 450	NA	< 230	< 230
1,4-Dichlorobenzene	R	<110	2870 J	<1100	6000	< 12500	< 450	NA	< 230	< 230
1-Chloronaphthalene	R	<110	< 570 J	<2750	<1100	< 31200	< 1130	NA	< 580	< 580
1-Methylnaphthalene	R	<120	< 230 J	<1100	<120	< 12500	< 450	NA	< 230	< 230
1-Naphthylamine	R	<900	< 780 J	<3740	<9300	< 42400	< 1530	NA	< 780	< 790
2,3,4,6-Tetrachlorophenol	R	<94	< 460 J	<2200	<960	< 24900	< 900	NA	< 460	< 470
2,3-Dichloroaniline	R	<120	< 230 J	<1100	<1200	< 12500	< 450	NA	< 230	< 230
2,4,5-Trichlorophenol	R	<94	< 230 J	<1100	<960	< 12500	< 450	NA	< 230	< 230
2,4,6-Trichlorophenol	R	<120	< 230 J	<1100	<1200	< 12500	< 450	NA	< 230	< 230
2,4-Dichlorophenol	R	<130	< 230 J	<1100	<1300	< 12500	< 450	NA	< 230	< 230
2,4-Dimethylphenol	R	<130	< 230 J	<1100	<1300	< 12500	< 450	NA	< 230	< 230
2,4,6-Dinitrophenol	R	<820	< 1430 J	<6820	<8400	< 77300	< 2800	NA	< 1430	< 1450
2,4-Dinitrotoluene	R	<110	980 J	<1100	<1100	< 12500	< 450	NA	< 230	< 230
2,4-Toluenediamine	R	<360	9430 J	<5500	4900UJ	3670000	< 2260	NA	< 1150	< 1170
2,6-Dichlorophenol	R	<130	< 230 J	<1100	<1300	< 12500	< 450	NA	< 230	< 230
2,6-Dinitrotoluene	R	<130	3380 J	<1100	<130	< 12500	< 450	NA	260	< 230
2-Chloronaphthalene	R	<130	< 230 J	<1100	<130	< 12500	< 450	NA	< 230	< 230
2-Chlorophenol	R	<110	< 230 J	<1100	<1100	< 12500	< 450	NA	< 230	< 230
2-Methylnaphthalene	R	<120	< 230 J	<1100	<1200	< 12500	< 450	NA	< 230	< 230
2-Naphthylamine	R	<730	< 870 J	<4180	<7500	< 47400	< 1720	NA	< 880	< 890
2-Nitroaniline	R	<120	< 280 J	<1320	<1200	< 15000	< 540	NA	< 280	< 280
2-Nitrodiphenylamine	R	<94	< 230 J	<1100	<960	< 12500	< 450	NA	< 230	< 230
2-Nitrophenol	R	<110	< 230 J	<1100	<1100	< 12500	< 450	NA	< 230	< 230
2-Picoline	R	<110	< 850 J	<4070	<1100	< 46100	< 1670	NA	< 850	< 860
3,3'-Dichlorobenzidine	R	<280	< 1400 J	<6710	<2900	< 76100	< 2750	NA	< 1410	< 1430
3-Methylcholanthrene	R	<130	< 230 J	<1100	<1300	< 12500	< 450	NA	< 230	< 230
3-Nitroaniline	R	<70	< 230 J	<1100	<720	< 12500	< 450	NA	< 230	< 230
4,4' Methyleneedianiline	R	<1500	8250 J	45870	<15000	562000	8170	NA	< 2030	< 2060
4,6-Dinitro-o-cresol	R	<400	< 230 J	<1100	<4100	< 12500	< 450	NA	< 230	< 230

TABLE 4.5-1
Statistical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB01-0001	SM010-TB01-0001	SM010-TB01-0305	SM010-TB01-0305RS	SM010-TB01-0305	SM010-TB01-1113	SM010-TB02-0001	SM010-TB02-0305	SM010-TB02-0305RS	SM010-TB02-0507
SAMPLE LOCATION	0.00-1.00 TB01 6/18/1997	0.00-1.00 TB01 11/12/1999	3.00-5.00 TB01 6/18/1997	3.00-5.00 TB01 7/18/1997	3.00-5.00 TB01 11/12/1999	11.00-13.00 TB01 6/18/1997	0.00-1.00 TB02 6/18/1997	3.00-5.00 TB02 6/18/1997	3.00-5.00 TB02 7/18/1997	5.00-7.00 TB02 6/18/1997
PARAMETER										
4-Aminobiphenyl	R	<580	<230 J	<1100	<5900	<12500	<450	NA	<230	<230
4-Aminodiphenylamine	R	NA	<570 J	<2750	NA	<31200	<1130	NA	<580	<580
4-Bromophenyl phenyl ether	R	<130	<230 J	<1100	<1300	<12500	<450	NA	<230	<230
4-Chloro-m-cresol	R	<150	<230 J	<1100	<1600	<12500	<450	NA	<230	<230
4-Chlorophenylphenyl ether	R	<120	<230 J	<1100	<1200	<12500	<450	NA	<230	<230
4-Nitroaniline	R	<94	<230 J	<1100	<960	<12500	<450	NA	<230	<230
4-Nitrophenol	R	<360	<230 J	<1100	<3700	<12500 J	<450 J	NA	<230 J	<230 J
5-Nitro-o-toluidine	R	<110	850 J	<1100	<1100	<12500	<450	NA	<230	<230
7,12-dimethylbenz[a]anthracene	R	<160	<230 J	<1100	<1700	<12500	<450	NA	<230	<230
Acenaphthene	R	<130	<230 J	<1100	<1300	<12500	<450	NA	<230	<230
Acenaphthylene	R	<130	<230 J	<1100	<1300	<12500	<450	NA	<230	<230
Acetophenone	R	<110	<300 J	<1430	<1100	<16200	<590	NA	<300	<300
Aniline	R	<520	12100 J	17270	13000	112000	<630	NA	<320	<330
Anthracene	R	<110	<230 J	<1100	<1100	<12500	<450	NA	<230	<230
Azobenzene	R	<130	<280 J	<1320	<1300	<15000	<540	NA	<280	<280
Benzidine	R	<1500	<3680 J	<17600	<15000	<200000	<7220	NA	<3690	<3740
Benz(a)anthracene	R	<130	<300 J	<1430	<1300	<16200	<590	NA	<300	<300
Benz(a)pyrene	R	<130	<230 J	<1100	<1300	<12500	<450	NA	<230	<230
Benz(b)fluoranthene	R	<110	<230 J	<1100	<1100	<12500	<450	NA	<230	<230
Benz(o)perylene	R	<210	<250 J	<1210	<2200	<13700	<500	NA	<250	<260
Benz(k)fluoranthene	R	<140	<230 J	<1100	<1400	<12500	<450	NA	<230	<230
Benzoic Acid	R	<130	<230 J	<1100	<13000	<12500	<450	NA	<230	<230
Benzyl Alcohol	R	<110	<230 J	<1100	<1100	<12500	<450	NA	<230	<230
Benzyl butyl phthalate	R	<120	<230 J	<1100	<1200	<12500	<450	NA	<230	<230
Bis(2-chloroethoxymethane)	R	<120	<230 J	<1100	<1200	<12500	<450	NA	<230	<230
Bis(2-chloroethyl)ether	R	<110	<230 J	<1100	<1100	<12500	<450	NA	<230	<230
Bis(2-chloroisopropyl)ether	R	<110	1410 J	<1100	<1100	<12500 J	<450 J	NA	<230 J	<230 J
Bis(2-ethylhexyl) phthalate	R	<130	420 JB	<1320	<1300	<15000	<540	NA	<280	460 B
Bisphenol A	R	<180	65400 J	64790	3000	28700	<810	NA	9170	3640
Carbazole	R	<82	<115 J	<5500	<840	<62300	<2260	NA	R	<1170
Chrysene	R	<130	<230 J	<1100	<1300	<12500	<450	NA	<230	<230
Cyclohexanone	R	<590	1300 J	<1100	<600	<12500	<450	NA	<230	<230
Di-n-butyl phthalate	R	140UB	<230 J	<1100	<1100	<12500 J	5780 JB	NA	640 JB	2870 JB
Di-n-octyl phthalate	R	<140	<230 J	<1100	<1400	<12500	<450	NA	<230	<230
Dibenzo(a,h)anthracene	R	<150	<230 J	<1100	<1600	<12500	<450	NA	<230	<230
Dibenzofuran	R	<110	<230 J	<1100	<1100	<12500	<450	NA	<230	<230
Diethyl Phthalate	R	<110	<230 J	<1100	<1100	<12500	<450	NA	<230	<230
Dimethylphthalate	R	<110	<230 J	<1100	<1100	<12500	<450	NA	<230	<230
Ethyl Methane Sulfonate	R	<94	<410 J	<1980	<960	<22400	<810	NA	<410	<420
Fluoranthene	R	<120	<230 J	<1100	<1200	<12500	<450	NA	<230	<230
Fluorene	R	<130	<230 J	<1100	<1300	<12500 J	<450 J	NA	<230 J	<230 J
Heptachlor	R	<94	<250 J	<1210	<960	<13700	<500	NA	R	<260
Hexachlorobenzene	R	<160	<230 J	<1100	<1700	<12500	<450	NA	<230	<230
Hexachlorobutadiene	R	<110	<230 J	<1100	<1100	<12500	<450	NA	<230	<230
Hexachlorocyclopentadiene	R	<1600	<230 J	<1100	<16000	<12500	<450	NA	<230	<230
Hexachloroethane	R	<110	<230 J	<1100	<1100	<12500	<450	NA	<230	<230
Indeno(1,2,3-cd)pyrene	R	<160	<230 J	<1100	<1700	<12500	<450	NA	<230	<230
Isophorone	R	<140	<230 J	<1100	<1400	<12500	<450	NA	<230	<230
Methyl methane sulfonate	R	<120	<230 J	<1100	<1200	<12500	<450	NA	<230	<230
N-Nitrosodibutylamine	R	<140	<230 J	<1100	<1400	<12500	<450	NA	<230	<230
N-Nitrosodimethylamine	R	<110	<230 J	<1100	<1100	<12500 J	<450 J	NA	<230 J	<230 J
N-Nitrosodiphenylamine	R	<330	<300 J	<1430	<3400	<16200	<590	NA	<300	<300
N-Nitrosodipropylamine	R	<110	<230 J	<1100	<1100	<12500	<450	NA	<230	<230
N-Nitrosopiperidine	R	<120	<230 J	<1100	<1200	<12500	<450	NA	<230	<230
Naphthalene	R	<120	<230 J	<1100	<120	<12500	<450	NA	<230	<230
Nitrobenzene	R	<110	240 J	<1100	<1100	<12500	<450	NA	<230	<230
Pentachlorobenzene	R	<130	<390 J	<1870	<1300	<21200	<770	NA	<390	<400

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB01-0001 0.00-1.00 TB01 6/18/1997	SM010-TB01-0001 0.00-1.00 TB01 11/12/1999	SM010-TB01-0305 3.00-5.00 TB01 6/18/1997	SM010-TB01-0305RS 3.00-5.00 TB01 7/18/1997	SM010-TB01-0305 3.00-5.00 TB01 11/12/1999	SM010-TB01-1113 11.00-13.00 TB01 6/18/1997	SM010-TB02-0001 0.00-1.00 TB02 6/18/1997	SM010-TB02-0305 3.00-5.00 TB02 6/18/1997	SM010-TB02-0305RS 3.00-5.00 TB02 7/18/1997	SM010-TB02-0507 5.00-7.00 TB02 6/18/1997
PARAMETER										
Pentachloronitrobenzene	R	<82	<230 J	<1100	<840	<12500	<450	NA	<230	<230
Pentachlorophenol	R	<290	<230 J	<1100	<3000	<12500	<450	NA	<230	<230
Phenacetin	R	<110	<230 J	<1100	<1100	<12500	<450	NA	<230	<230
Phenanthrene	R	<120	260 J	<1100	<1200	<12500	<450	NA	<230	<230
Phenol	R	<120	1290 J	836	<1200	<7480	<270	NA	<140	<140
Pyrene	R	<130	<230 J	<1100	<1300	<12500	<450	NA	<230	<230
Pyridine	R	<110	<250 J	<1210	<1100	<13700	<500	NA	<250	<260
Trimethylphosphate	R	<110	<230 J	<1100	<1100	<12500	<450	NA	<230	<230
Triphenylphosphate	R	<110	<1150 J	<5500	<1600	<62300	<2260	NA	<1150	<1170
m,p-Cresol	R	<210	<340 J	<1650	<2200	<18700	<680	NA	<350	<350
m-Nitrotoluene	R	<120	<230 J	<1100	<1200	<12500	<450	NA	<230	<230
m-Toluidine	R	<94	460 J	<2200	<960	<24900	<900	NA	<460	<470
o,p-Toluidine	R	<82	<1170 J	11660	<840	<63600	<2300	NA	<1180	<1190
o-Cresol	R	<94	<230 J	<1100	<960	<12500	<450	NA	<230	<230
o-Nitrotoluene	R	<130	<230 J	<1100	<1300	<12500	<450	NA	<230	<230
p-Chloroaniline	R	210	22400 J	3410	3600	395000	1790	NA	280	<230
p-Dimethylaminoazobenzene	R	<150	240 J	<1100	<1600	<12500	<450	NA	<230	<230
p-Nitrotoluene	R	<110	440 J	<1650	<1100	<18700	<680	NA	<350	<350
Metals (µg/kg)										
Antimony	<465	NA	<460	NA	NA	<499	<451	<465	NA	NA
Cadmium	901	NA	655	NA	NA	<476	805	685	NA	NA
Chromium	18092	NA	11978	NA	NA	7392	11207	10593	NA	NA
Lead	21144	NA	12988	NA	NA	<476	11101	12266	NA	NA
Nickel	50821	NA	39155	NA	NA	923454	16955	32370	NA	NA
Miscellaneous (µg/kg)										
Percent Moisture	14.0%	14.8%	13.0%	10 %	16.8%	19.8%	11.4%	13.9%	13 %	14.4%
Total Organic Carbon	NA	NA	NA	NA	NA	NA	3200000	3000000 J	NA	NA
BTU from ECD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ignitability (Flash Point) for S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Percent Ash	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH in Water (Solid Sample)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, additional information provided in Appendix G

U=Nondetect at reported limit

<Nondetect at reported limit

BLE 4.5-1
Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

PARAMETER	SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB02-1819 18.00-19.00 TB02 7/16/1997	SM010-TB03-0001 0.00-1.00 TB03 6/18/1997	SM010-TB03-0001RS 0.00-1.00 TB03 7/18/1997	SM010-TB03-0305 3.00-5.00 TB03 6/18/1997	SM010-TB03-0810 8.00-10.00 TB03 6/18/1997	SM010-TB04-0001 0.00-1.00 TB04 6/25/1997	SM010-TB04-0305 3.00-5.00 TB04 6/25/1997	SM010-TB04-0305 3.00-5.00 TB04 6/25/1997	SM010-TB04-0305 3.00-5.00 TB04 11/11/1999	SM010-TB05-0001 0.00-1.00 TB05 6/26/1997
Volatiles (µg/kg)											
1,1,1,2-Tetrachloroethane	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	NA	< 267
1,1,1-Trichloroethane	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
1,1,2,2-Tetrachloroethane	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
1,1,2-Trichloroethane	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	NA	< 267
1,1-Dichloroethane	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
1,1-Dichloroethene	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	NA	< 267
1,1-Dichloropropene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
1,2,3-Trichlorobenzene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
1,2,3-Trichloropropane	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
1,2,4-Trichlorobenzene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
1,2,4-Trimethylbenzene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
1,2-Dibromo-3-chloropropane	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	NA	< 267
1,2-Dibromoethane	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
1,2-Dichlorobenzene	1050	636 J	NA	1010	1060	1940	291	NA	NA	NA	< 267
1,2-Dichloroethane	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	NA	< 267
1,2-Dichloropropane	< 467	< 456	NA	< 428	< 459	< 410	< 443	NA	NA	NA	< 406
1,3,5-Trimethylbenzene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
1,3-Dichlorobenzene	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	NA	< 267
1,3-Dichloropropane	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
1,4-Dichlorobenzene	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	NA	< 267
2,2-Dichloropropane	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
2-Butanone (MEK)	< 1080	< 1060	NA	< 992	< 1060	< 949	< 1030	NA	NA	NA	< 939
2-Chloroethyl Vinyl Ether	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	NA	< 267
2-Chlorotoluene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
2-Hexanone	< 467	< 456	NA	< 428	< 459	< 410	< 443	NA	NA	NA	< 406
4-Chlorotoluene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
4-Methyl-2-pentanone (MK)	< 467	< 456	NA	< 428	< 459	< 410	< 443	NA	NA	NA	< 406
Acetone	< 1080	< 1060	NA	< 992	< 1060	< 949	< 1030	NA	NA	NA	< 939
Acrolein	< 3080	< 3000	NA	< 2820	< 3020	< 2690	< 2910	NA	NA	NA	< 2670
Acrylonitrile	< 1600	< 1560	NA	< 1470	< 1570	< 1400	< 1520	NA	NA	NA	< 1390
Allyl Chloride	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
Benzene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
Bromobenzene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
Bromochloromethane	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
Bromodichloromethane	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	NA	< 267
Bromoform	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
Bromomethane	< 467	< 456	NA	< 428	< 459	< 410	< 443	NA	NA	NA	< 406
Carbon Disulfide	< 467	< 456	NA	< 428	< 459	< 410	< 443	NA	NA	NA	< 406
Carbon Tetrachloride	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
Chlorobenzene	529 J	324 J	NA	2030	1120	625 J	< 152	NA	NA	NA	< 139
Chloroethane	< 467	< 456	NA	< 428	< 459	< 410	< 443	NA	NA	NA	< 406
Chloroform	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
Chloromethane	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	NA	< 267
Dibromochloromethane	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
Dibromomethane	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
Dichlorodifluoromethane	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	NA	< 267
Ethyl Methacrylate	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
Ethylbenzene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
Freon 113	< 308	< 300	NA	293 J	339 JB	6470	350 J	NA	NA	NA	673 J
Freon 141b	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	NA	< 139
Hexachlorobutadiene	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	NA	< 267
Isopropylbenzene	< 467	< 456	NA	< 428	< 459	< 410	< 443	NA	NA	NA	< 406
Methyl Iodide	< 467	< 456	NA	< 428	< 459	< 410	< 443	NA	NA	NA	< 406
Methylene Chloride	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	NA	< 267

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB02-1819	SM010-TB03-0001	SM010-TB03-0001RS	SM010-TB03-0305	SM010-TB03-0810	SM010-TB04-0001	SM010-TB04-0305	SM010-TB04-0305	SM010-TB04-0305	SM010-TB05-0001
SAMPLE DEPTH(ft)	18.00-19.00	0.00-1.00	0.00-1.00	3.00-5.00	8.00-10.00	0.00-1.00	3.00-5.00	3.00-5.00	3.00-5.00	0.00-1.00
SAMPLE LOCATION	TB02	TB03	TB03	TB03	TB03	TB04	TB04	TB04	TB04	TB05
SAMPLE DATE	7/16/1997	6/18/1997	7/18/1997	6/18/1997	6/18/1997	6/25/1997	6/25/1997	6/25/1997	11/11/1999	6/26/1997
PARAMETER										
Naphthalene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	< 139
Styrene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	< 139
Tetrachloroethene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	< 139
Toluene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	< 139
Trichloroethene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	< 139
Trichlorofluoromethane	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	< 267
Vinyl Acetate	< 467	< 456	NA	< 428	< 459	< 410	< 443	NA	NA	< 406
Vinyl Chloride	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	< 267
cis-1,2-Dichloroethene	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	< 267
cis-1,3-Dichloropropene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	< 139
m+p-Xylene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	< 139
n-Butylbenzene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	< 139
n-Propylbenzene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	< 139
o-Xylene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	< 139
p-Isopropyltoluene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	< 139
sec-Butylbenzene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	< 139
tert-Butylbenzene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	< 139
trans-1,2-Dichloroethene	< 308	< 300	NA	< 282	< 302	< 269	< 291	NA	NA	< 267
trans-1,3-Dichloropropene	< 160	< 156	NA	< 147	< 157	< 140	< 152	NA	NA	< 139
trans-1,4-Dichloro-2-butene	< 1600	< 1560	NA	< 1470	< 1570	< 1400	< 1520	NA	NA	< 1390
Semivolatile (µg/kg)										
1,2,3-Trichlorobenzene	< 300	NA	< 530	< 270	< 290	< 12900	R	< 120	< 120	< 2560
1,2,4,5-Tetrachlorobenzene	< 300	NA	< 530	< 270	< 290	< 12900	R	< 130	< 130	< 2560
1,2,4-Trichlorobenzene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 120	< 120	< 2130
1,2-Dichlorobenzene	1940	NA	2560	310	1840	< 10800	R	< 110	< 110	< 2130
1,3-Dichlorobenzene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 94	< 940	< 2130
1,4-Dichlorobenzene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
1-Chloronaphthalene	< 610	NA	< 1110	< 560	< 600	< 27000	R	< 110	< 110	< 5340
1-Methylnaphthalene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 120	< 120	< 2130
1-Naphthylamine	< 840	NA	< 1510	< 770	< 820	< 36700	R	< 900	< 900	< 7260
2,3,4,6-Tetrachlorophenol	< 490	NA	< 890	< 450	< 480	< 21600	R	< 94	< 94	< 4270
2,3-Dichloroaniline	< 250	NA	< 450	< 230	< 240	< 10800	R	< 120	< 120	< 2130
2,4,5-Trichlorophenol	< 250	NA	< 450	< 230	< 240	< 10800	R	< 94	< 94	< 2130
2,4,6-Trichlorophenol	< 250	NA	< 450	< 230	< 240	< 10800	R	< 120	< 120	< 2130
2,4-Dichlorophenol	< 250	NA	< 450	< 230	< 240	< 10800	R	< 130	< 130	< 2130
2,4-Dimethylphenol	< 250	NA	< 450	< 230	< 240	< 10800	R	< 130	< 130	< 2130
2,4-Dinitrophenol	< 1530	NA	< 2760	< 1400	< 1500	< 66800	R	< 820	< 820	< 13200
2,4-Dinitrotoluene	< 250	NA	< 450	< 230	270	< 10800	R	< 110	< 110	< 2130
2,4-Toluenediamine	< 1230	NA	< 2230	< 1130	< 1210	< 53900	R	< 360	< 360	< 10700
2,6-Dichlorophenol	< 250	NA	< 450	< 230	< 240	< 10800	R	< 1300	< 130	< 2130
2,6-Dinitrotoluene	< 250	NA	< 450	280	240	< 10800	R	< 130	< 130	< 2130
2-Chloronaphthalene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 130	< 130	< 2130
2-Chlorophenol	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
2-Methylnaphthalene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 120	< 120	< 2130
2-Naphthylamine	< 930	NA	< 1690	< 860	< 920	< 41000	R	< 730	< 730	< 8110
2-Nitroaniline	< 300	NA	< 530	< 270	< 290	< 12900	R	< 120	< 120	< 2560
2-Nitrodiphenylamine	< 250	NA	< 450	< 230	< 240	< 10800	R	< 94	< 94	< 2130
2-Nitrophenol	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
2-Picoline	< 910	NA	< 1650	< 830	< 890	< 39900	R	< 110	< 110	< 7900
3,3'-Dichlorobenzidine	< 1500	NA	< 2720	< 1380	< 1480	< 65800	R	< 280	< 280	< 13000
3-Methylcholanthrene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 130	< 130	< 2130
3-Nitroaniline	< 250	NA	< 450	< 230	< 240	< 10800	R	< 70	< 70	< 2130
4,4'-Methylenedianiline	< 2160	NA	< 3920	< 1980	< 2130	< 94900	R	< 1500	< 1500	< 18800
4,6-Dinitro-o-cresol	< 250	NA	< 450	< 230	< 240	< 10800	R	< 400	< 400	< 2130

TABLE 4.5-1
Chemical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB02-1819	SM010-TB03-0001	SM010-TB03-0001RS	SM010-TB03-0305	SM010-TB03-0810	SM010-TB04-0001	SM010-TB04-0305	SM010-TB04-0305	SM010-TB04-0305	SM010-TB05-0001
SAMPLE DEPTH(ft)	18.00-19.00	0.00-1.00	0.00-1.00	3.00-5.00	8.00-10.00	0.00-1.00	3.00-5.00	3.00-5.00	3.00-5.00	0.00-1.00
SAMPLE LOCATION	TB02	TB03	TB03	TB03	TB03	TB04	TB04	TB04	TB04	TB05
SAMPLE DATE	7/16/1997	6/18/1997	7/18/1997	6/18/1997	6/18/1997	6/25/1997	6/25/1997	6/25/1997	11/11/1999	6/26/1997
PARAMETER										
4-Aminobiphenyl	< 250	NA	< 450	< 230	< 240	< 10800	R	< 570	< 570	< 2130
4-Aminodiphenylamine	< 610	NA	< 110	< 560	< 600	< 27000	R			< 5340
4-Bromophenyl phenyl ether	< 250	NA	< 450	< 230	< 240	< 10800	R	< 130	< 130	< 2130
4-Chloro-m-cresol	< 250	NA	< 450	< 230	< 240	< 10800	R	< 150	< 150	< 2130
4-Chlorophenylphenyl ether	< 250	NA	< 450	< 230	< 240	< 10800	R	< 120	< 120	< 2130
4-Nitroaniline	< 250	NA	< 450	< 230	< 240	< 10800	R	< 94	< 94	< 2130
4-Nitrophenol	< 250 J	NA	< 450 J	< 230 J	< 240 J	< 10800 J	R	< 360	< 360	< 2130 J
5-Nitro-o-toluidine	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
7,12-dimethylbenz[a]anthracene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 160	< 160	< 2130
Acenaphthene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 130	< 130	< 2130
Acenaphthylene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 130	< 130	< 2130
Acetophenone	< 320	NA	< 580	< 290	< 310	< 14000	R	< 110	< 110	< 2780
Aniline	< 340	NA	< 620	< 320	370	< 15100	R	< 520	< 520	< 2990
Anthracene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
Azobenzene	< 300	NA	< 530	< 270	< 290	< 12900	R	< 130	< 130	< 2560
Benzidine	< 3940	NA	< 7130	< 3610	< 3870	< 172000	R	< 1500	< 1500	< 34200
Benzo(a)anthracene	< 320	NA	< 580	< 290	< 310	< 14000	R	< 130	< 130	< 2780
Benzo(a)pyrene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 130	< 130	< 2130
Benzo(b)fluoranthene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
Benzo(ghi)perylene	< 270	NA	< 490	< 250	< 270	< 11900	R	< 210	< 210	< 2350
Benzo(k)fluoranthene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 140	< 140	< 2130
Benzoic Acid	< 250	NA	< 450	< 230	< 240	< 10800	R	< 1300	< 130	< 2130
Benzyl Alcohol	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
Benzyl butyl phthalate	< 250	NA	< 450	< 230	< 240	< 10800	R	< 120	< 120	< 2130
Bis(2-chloroethoxyethane)	< 250	NA	< 450	< 230	< 240	< 10800	R	< 120	< 120	< 2130
Bis(2-chloroethyl)ether	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
Bis(2-chloroisopropyl)ether	< 250 J	NA	< 450 J	1380 J	< 240 J	< 10800 J	R	< 110	< 110	< 2130 J
Bis(2-ethylhexyl) phthalate	560 B	NA	1280	< 270	330 B	< 12900	R	< 130	< 130	< 2560
Bisphenol A	13000	NA	17300	6810	7230	25100	R	< 180	< 180	6320
Carbazole	R	NA	R	< 1130	< 1210	< 53900	R	< 82	< 82	< 10700
Chrysene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 130	< 130	< 2130
Cyclohexanone	< 250	NA	< 450	< 230	< 240	< 10800	R	< 59	< 59	< 2130
Di-n-butyl phthalate	660 JB	NA	710 JB	5500 JB	9500 JB	< 10800 J	R	120	120 UB	< 2130 J
Di-n-octyl phthalate	< 250	NA	< 450	< 230	< 240	< 10800	R	< 140	< 140	< 2130
Dibenzo(a,h)anthracene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 150	< 150	< 2130
Dibenzofuran	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
Diethyl Phthalate	< 250	NA	< 450	< 230	< 240	< 10800	R	160	160 B	< 2130
Dimethylphthalate	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
Ethyl Methane Sulfonate	< 440	NA	< 800	< 410	< 440	< 19400	R	< 94	< 94	< 3840
Fluoranthene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 120	< 120	< 2130
Fluorene	< 250 J	NA	< 450 J	< 230 J	< 240 J	< 10800 J	R	< 130	< 130	< 2130 J
Heptachlor	R	NA	R	< 250	< 270	< 11900	R	< 94	< 94	< 2350
Hexachlorobenzene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 160	< 160	< 2130
Hexachlorobutadiene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
Hexachlorocyclopentadiene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 160	< 160	< 2130
Hexachloroethane	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
Indeno[1,2,3-cd]pyrene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 160	< 160	< 2130
Isophorone	< 250	NA	< 450	< 230	< 240	< 10800	R	< 140	< 140	< 2130
Methyl methane sulfonate	< 250	NA	< 450	< 230	< 240	< 10800	R	< 120	< 120	< 2130
N-Nitrosodibutylamine	< 250	NA	< 450	< 230	< 240	< 10800	R	< 140	< 140	< 2130
N-Nitrosodimethylamine	< 250 J	NA	< 450 J	< 230 J	< 240 J	< 10800 J	R	< 110	< 110	< 2130 J
N-Nitrosodiphenylamine	< 320	NA	< 580	< 290	< 310	< 14000	R	< 330	< 330	< 2780
N-Nitrosodipropylamine	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
N-Nitrosopiperidine	< 250	NA	< 450	< 230	< 240	< 10800	R	< 120	< 120	< 2130
Naphthalene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 120	< 120	< 2130
Nitrobenzene	< 250	NA	450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
Pentachlorobenzene	< 420	NA	< 760	< 380	< 410	< 18300	R	< 130	< 130	< 3630

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB02-1819	SM010-TB03-0001	SM010-TB03-0001RS	SM010-TB03-0305	SM010-TB03-0810	SM010-TB04-0001	SM010-TB04-0305	SM010-TB04-0305	SM010-TB04-0305	SM010-TB05-0001
SAMPLE DEPTH(ft)	18.00-19.00	0.00-1.00	0.00-1.00	3.00-5.00	8.00-10.00	0.00-1.00	3.00-5.00	3.00-5.00	3.00-5.00	0.00-1.00
SAMPLE LOCATION	TB02	TB03	TB03	TB03	TB03	TB04	TB04	TB04	TB04	TB05
SAMPLE DATE	7/16/1997	6/18/1997	7/18/1997	6/18/1997	6/18/1997	6/25/1997	6/25/1997	6/25/1997	11/11/1999	6/26/1997
PARAMETER										
Pentachloronitrobenzene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 82	< 82	< 2130
Pentachlorophenol	< 250	NA	< 450	< 230	< 240	< 10800	R	< 290	< 290	< 2130
Phenacetin	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
Phenanthrene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 120	< 120	< 2130
Phenol	< 150	NA	300	< 140	< 150	< 6470	R	< 120	< 120	< 1280
Pyrene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 130	< 130	< 2130
Pyridine	< 270	NA	< 490	< 250	< 270	< 11900	R	< 110	< 110	< 2350
Trimethylphosphate	< 250	NA	< 450	< 230	< 240	< 10800	R	< 110	< 110	< 2130
Triphenylphosphate	< 1230	NA	< 2230	< 1130	< 1210	< 53900	R	< 150	< 110	< 10700
m,p-Cresol	< 370	NA	< 670	< 340	< 360	< 16200	R	< 210	< 210	< 3200
m-Nitrotoluene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 120	< 120	< 2130
m-Toluidine	< 490	NA	< 890	< 450	< 480	< 21600	R	< 94	< 94	< 4270
o,p-Toluidine	< 1250	NA	< 2270	< 1150	< 1230	< 55000	R	< 82	< 82	< 10900
o-Cresol	< 250	NA	< 450	< 230	< 240	< 10800	R	< 94	< 940	< 2130
o-Nitrotoluene	< 250	NA	480	< 230	< 240	< 10800	R	< 130	< 130	< 2130
p-Chloroaniline	< 250	NA	1060	940	790	< 10800	R	< 94	210	< 2130
p-Dimethylaminoazobenzene	< 250	NA	< 450	< 230	< 240	< 10800	R	< 150	< 150	< 2130
p-Nitrotoluene	< 370	NA	< 670	< 340	< 360	< 16200	R	< 110	< 110	< 3200
Metals (µg/kg)										
Antimony	< 492	< 480	NA	< 451	< 484	< 431	< 466	NA	NA	< 427
Cadmium	806	790	NA	760	< 469	1383	1393	NA	NA	< 425
Chromium	18647	9803	NA	16472	11202	10133	19129	NA	NA	5922
Lead	20056	11367	NA	18826	11203	23675	17823	NA	NA	9284
Nickel	59667	14424	NA	61115	21701	74847	30035	NA	NA	16905
Miscellaneous (µg/kg)										
Percent Moisture	19 %	16.7%	10 %	11.3%	17.3%	7.23%	14.2%	NA	14.7%	6.32%
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BTU from ECD	< 500 BTU	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ignitability (Flash Point) for S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Percent Ash	2410 %	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH in Water (Solid Sample)	NA	NA	NA	7.4 std	NA	NA	NA	NA	NA	NA

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, additional informa

U=Nondetect at reported limit

<=Nondetect at reported limit

LE 4.5-1
Situational Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB05-0305 3.00-5.00 TB05 6/26/1997	SM010-TB05-0305 3.00-5.00 TB05 11/11/1999	SM010-TB05-0507 5.00-7.00 TB05 11/11/1999	SM010-TB05-0709 7.00-9.00 TB05 6/26/1997	SM010-TB05-1214 12.00-14.00 TB05 7/14/1997	SM010-TB06-0001 0.00-1.00 TB06 6/25/1997	SM010-TB06-0305 3.00-5.00 TB06 6/25/1997	SM010-TB06-0305 3.00-5.00 TB06 11/11/1999	SM010-TB06-0507 5.00-7.00 TB06 11/11/1999	SM010-TB06-0709 7.00-9.00 TB06 6/25/1997
PARAMETER										
Volatiles (µg/kg)										
1,1,1,2-Tetrachloroethane	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
1,1,1-Trichloroethane	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
1,1,2,2-Tetrachloroethane	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
1,1,2-Trichloroethane	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
1,1-Dichloroethane	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
1,1-Dichloroethene	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
1,1-Dichloropropene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
1,2,3-Trichlorobenzene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
1,2,3-Trichloropropane	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
1,2,4-Trichlorobenzene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
1,2,4-Trimethylbenzene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
1,2-Dibromo-3-chloropropane	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
1,2-Dibromoethane	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
1,2-Dichlorobenzene	< 293	NA	NA	< 296	4630	< 271	< 299	NA	NA	< 297
1,2-Dichloroethane	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
1,2-Dichloropropene	< 445	NA	NA	< 450	< 440	< 412	< 454	NA	NA	< 451
1,3,5-Trimethylbenzene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
1,3-Dichlorobenzene	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
1,3-Dichloropropane	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
1,4-Dichlorobenzene	< 293	NA	NA	< 296	463 J	< 271	< 299	NA	NA	< 297
2,2-Dichloropropane	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
2-Butanone (MEK)	< 1030	NA	NA	< 1040	< 1020	< 953	< 1050	NA	NA	< 1040
2-Chloroethyl Vinyl Ether	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
2-Chlorotoluene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
2-Hexanone	< 445	NA	NA	< 450	< 440	< 412	< 454	NA	NA	< 451
4-Chlorotoluene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
4-Methyl-2-pentanone (MIK)	< 445	NA	NA	< 450	< 440	< 412	< 454	NA	NA	< 451
Acetone	< 1030	NA	NA	< 1040	< 1020	< 953	< 1050	NA	NA	< 1040
Acrolein	< 2930	NA	NA	< 2960	< 2890	< 2710	< 2990	NA	NA	< 2970
Acrylonitrile	< 1520	NA	NA	< 1540	< 1500	< 1410	< 1550	NA	NA	< 1540
Allyl Chloride	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Benzene	< 152	NA	NA	< 154	< 150	184 J	< 155	NA	NA	< 154
Bromobenzene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Bromochloromethane	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Bromodichloromethane	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
Bromoform	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Bromomethane	< 445	NA	NA	< 450	< 440	< 412	< 454	NA	NA	< 451
Carbon Disulfide	< 445	NA	NA	< 450	< 440	< 412	< 454	NA	NA	< 451
Carbon Tetrachloride	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Chlorobenzene	< 152	NA	NA	< 154	903	1300	< 155	NA	NA	178 J
Chloroethane	< 445	NA	NA	< 450	< 440	< 412	< 454	NA	NA	< 451
Chloroform	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Chloromethane	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
Dibromochloromethane	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Dibromomethane	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Dichlorodifluoromethane	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
Ethyl Methacrylate	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Ethylbenzene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Freon 113	680 J	NA	NA	< 296	984 J	< 271	< 299	NA	NA	< 297
Freon 141b	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Hexachlorobutadiene	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
Isopropylbenzene	< 445	NA	NA	< 450	< 440	< 412	< 454	NA	NA	< 451
Methyl Iodide	< 445	NA	NA	< 450	< 440	< 412	< 454	NA	NA	< 451
Methylene Chloride	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB05-0305 3.00-5.00 TB05 6/26/1997	SM010-TB05-0305 3.00-5.00 TB05 11/11/1999	SM010-TB05-0507 5.00-7.00 TB05 11/11/1999	SM010-TB05-0709 7.00-9.00 TB05 6/26/1997	SM010-TB05-1214 12.00-14.00 TB05 7/14/1997	SM010-TB06-0001 0.00-1.00 TB06 6/25/1997	SM010-TB06-0305 3.00-5.00 TB06 6/25/1997	SM010-TB06-0305 3.00-5.00 TB06 11/11/1999	SM010-TB06-0507 5.00-7.00 TB06 11/11/1999	SM010-TB06-0709 7.00-9.00 TB06 6/25/1997
PARAMETER										
Naphthalene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Styrene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Tetrachloroethene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Toluene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	297 J
Trichloroethene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
Trichlorofluoromethane	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
Vinyl Acetate	< 445	NA	NA	< 450	< 440	< 412	< 454	NA	NA	< 451
Vinyl Chloride	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
cis-1,2-Dichloroethene	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
cis-1,3-Dichloropropene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
m+p-Xylene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
n-Butylbenzene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
n-Propylbenzene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
o-Xylene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
p-Isopropyltoluene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
sec-Butylbenzene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
tert-Butylbenzene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
trans-1,2-Dichloroethene	< 293	NA	NA	< 296	< 289	< 271	< 299	NA	NA	< 297
trans-1,3-Dichloropropene	< 152	NA	NA	< 154	< 150	< 141	< 155	NA	NA	< 154
trans-1,4-Dichloro-2-butene	< 1520	NA	NA	< 1540	< 1500	< 1410	< 1550	NA	NA	< 1540
Semivolatile (µg/kg)										
1,2,3-Trichlorobenzene	R	<120	<120	R	< 280	< 13000	R	<120	<1100	R
1,2,4,5-Tetrachlorobenzene	R	<130	<130	R	< 280	< 13000	R	<130	<1200	R
1,2,4-Trichlorobenzene	R	<120	<120	R	< 230	< 10800	R	<120	<1100	R
1,2-Dichlorobenzene	R	<100	190	R	11700	< 10800	R	<110	<1000	R
1,3-Dichlorobenzene	R	<93	<98	R	< 230	< 10800	R	<95	<900	R
1,4-Dichlorobenzene	R	<110	<110	R	720	< 10800	R	<110	<1000	R
1-Chloronaphthalene	R	<110	<110	R	< 580	< 27100	R	<110	<1000	R
1-Methylnaphthalene	R	130	<120	R	< 230	< 10800	R	420	<1100	R
1-Naphthylamine	R	<890	<940	R	< 790	< 36800	R	<910	<8700	R
2,3,4,6-Tetrachlorophenol	R	<93	<98	R	< 460	< 21700	R	<95	<900	R
2,3-Dichloroaniline	R	<120	<120	R	< 230	< 10800	R	<120	<1100	R
2,4,5-Trichlorophenol	R	<93	<98	R	< 230	< 10800	R	<95	<900	R
2,4,6-Trichlorophenol	R	<120	<120	R	< 230	< 10800	R	<120	<1100	R
2,4-Dichlorophenol	R	<130	<130	R	< 230	< 10800	R	<130	<1200	R
2,4-Dimethylphenol	R	<130	<130	R	< 230	< 10800	R	<130	<1200	R
2,4-Dinitrophenol	R	<810	<850	R	< 1440	< 67200	R	<830	<7900	R
2,4-Dinitrotoluene	R	<100	<110	R	< 230	< 10800	R	<110	<1000	R
2,4-Toluenediamine	R	<3500	<3700	R	< 1160	< 54200	R	<360	<3400	R
2,6-Dichlorophenol	R	<130	<130	R	< 230	< 10800	R	<130	<1200	R
2,6-Dinitrotoluene	R	<130	<130	R	280	< 10800	R	<130	<1200	R
2-Chloronaphthalene	R	<130	<130	R	< 230	< 10800	R	<130	<1200	R
2-Chlorophenol	R	<100	<110	R	< 230	< 10800	R	<110	<1000	R
2-Methylnaphthalene	R	130	<120	R	< 230	< 10800	R	450	<1100	R
2-Naphthylamine	R	<720	<760	R	< 880	< 41200	R	<730	<7000	R
2-Nitroaniline	R	<120	<120	R	< 280	< 13000	R	<120	<1100	R
2-Nitrodiphenylamine	R	<93	<98	R	< 230	< 10800	R	<95	<900	R
2-Nitrophenol	R	<100	<110	R	< 230	< 10800	R	<110	<1000	R
2-Picoline	R	<100	<110	R	< 860	< 40100	R	<110	<1000	R
3,3'-Dichlorobenzidine	R	<280	<290	R	< 1410	< 66100	R	<280	<2700	R
3-Methylcholanthrene	R	<130	<13	R	< 230	< 10800	R	<130	<1200	R
3-Nitroaniline	R	<70	<73	R	< 230	< 10800	R	<70	<680	R
4,4' Methyleneedianiline	R	<1500	<1500	R	< 2040	< 95300	R	<1500	<14000	R
4,6-Dinitro-o-cresol	R	<390	<410	R	< 230	< 10800	R	<400	<3800	R

LE 4.5-1
Statistical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB05-0305 3.00-5.00 TB05 6/26/1997	SM010-TB05-0305 3.00-5.00 TB05 11/11/1999	SM010-TB05-0507 5.00-7.00 TB05 11/11/1999	SM010-TB05-0709 7.00-9.00 TB05 6/26/1997	SM010-TB05-1214 12.00-14.00 TB05 7/14/1997	SM010-TB06-0001 0.00-1.00 TB06 6/25/1997	SM010-TB06-0305 3.00-5.00 TB06 6/25/1997	SM010-TB06-0305 3.00-5.00 TB06 11/11/1999	SM010-TB06-0507 5.00-7.00 TB06 11/11/1999	SM010-TB06-0709 7.00-9.00 TB06 6/25/1997
PARAMETER										
4-Aminobiphenyl	R	<570	<600	R	<230	<10800	R	<580	<5500	R
4-Aminodiphenylamine	R	<130	<130	R	<230	<10800	R	<130	<5500	R
4-Bromophenyl phenyl ether	R	<130	<130	R	<230	<10800	R	<150	<1500	R
4-Chloro-m-cresol	R	<130	<160	R	<230	<10800	R	<120	<1100	R
4-Chlorophenylphenyl ether	R	<120	<120	R	<230	<10800	R	<94	<900	R
4-Nitroaniline	R	<93	<98	R	<230	<10800	R	<360	<3500	R
4-Nitrophenol	R	<100	<380	R	<230 J	<10800 J	R	<110	<1000	R
5-Nitro-o-toluidine	R	<100	<110	R	<230	<10800	R	<160	<1600	R
7,12-dimethylbenz[a]anthracene	R	<160	<170	R	<230	<10800	R	<130	<1200	R
Acenaphthene	R	<130	<130	R	<230	<10800	R	<130	<1200	R
Acenaphthylene	R	<130	<130	R	<230	<10800	R	<130	<1200	R
Acetophenone	R	<100	<110	R	<300	<14100	R	<110	<100	R
Aniline	R	<510	<540	R	<320	<15200	R	<520	<5000	R
Anthracene	R	<100	<110	R	<230	<10800	R	<110	<1000	R
Azobenzene	R	<130	<130	R	<280	<13000	R	<130	<1200	R
Benzidine	R	<1500	<1500	R	<3700	<173000	R	<1500	<1400	R
Benzo(a)anthracene	R	<130	<130	R	<300	<14100	R	<130	<1200	R
Benzo(a)pyrene	R	<130	<130	R	<230	<10800	R	<130	<1200	R
Benzo(b)fluoranthene	R	<140	<110	R	<230	<10800	R	<110	<1000	R
Benzo(ghi)perylene	R	<210	<220	R	<250	<11900	R	260	<2000	R
Benzo(k)fluoranthene	R	<100	<150	R	<230	<10800	R	<140	<1400	R
Benzoic Acid	R	<1300	<1300	R	<230	<10800	R	<130	<12000	R
Benzyl Alcohol	R	<100	<110	R	<230	<10800	R	<110	<1000	R
Benzyl butyl phthalate	R	<120	<120	R	<230	<10800	R	<120	<1100	R
Bis(2-chloroethoxy)methane)	R	<120	<120	R	<230	<10800	R	<120	<1100	R
Bis(2-chloroethyl)ether	R	<100	<110	R	<230	<10800	R	<110	<1000	R
Bis(2-chloroisopropyl)ether	R	<100	<110	R	<230 J	<10800 J	R	<110	<1000	R
Bis(2-ethylhexyl) phthalate	R	<130	<130	R	500 B	<13000	R	<130	<1200	R
Bisphenol A	R	<170	<180	R	8750	50500	530 JB	<180	<1700	810 JB
Carbazole	R	<81	<85	R	R	<54200	R	<82	<790	R
Chrysene	R	<130	<130	R	<230	<10800	R	<130	<1200	R
Cyclohexanone	R	<58	<61	R	<230	<10800	R	<590	<560	R
Di-n-butyl phthalate	R	<100	130UB	R	1340 JB	<10800 J	R	1200UB	<1000	880 JB
Di-n-octyl phthalate	R	<140	130	R	<230	<10800	R	<140	<1000	R
Dibenz(a,h)anthracene	R	<150	<160	R	<230	<10800	R	<150	<1500	R
Dibenzofuran	R	<100	<110	R	<230	<10800	R	140	<1000	R
Diethyl Phthalate	R	180B	170B	R	<230	<10800	R	210B	1100	R
Dimethylphthalate	R	<100	<110	R	<230	<10800	R	<110	<1000	R
Ethyl Methane Sulfonate	R	<93	<98	R	<420	<19500	R	<95	<900	R
Fluoranthene	R	<120	<120	R	<230	<10800	R	<130	<1100	R
Fluorene	R	<130	<130	R	<230 J	<10800 J	R	<120	<1200	R
Heptachlor	R	<93	<98	R	R	<11900	R	<95	<900	R
Hexachlorobenzene	R	<160	<170	R	<230	<10800	R	<170	<1600	R
Hexachlorobutadiene	R	<100	<110	R	<230	<10800	R	<110	<1000	R
Hexachlorocyclopentadiene	R	<1600	<1600	R	<230	<10800	R	<1600	<15000	R
Hexachloroethane	R	<100	<110	R	<230	<10800	R	<110	<1000	R
Indeno(1,2,3-cd)pyrene	R	<160	<170	R	<230	<10800	R	<170	<1600	R
Isophorone	R	<140	<150	R	<230	<10800	R	<140	<1400	R
Methyl methane sulfonate	R	<120	<120	R	<230	<10800	R	<120	<1100	R
N-Nitrosodibutylamine	R	<140	<150	R	<230	<10800	R	<140	<1400	R
N-Nitrosodimethylamine	R	<100	<110	R	<230 J	<10800 J	R	<110	<1000	R
N-Nitrosodiphenylamine	R	<320	<340	R	<300	<14100	R	<330	<3200	R
N-Nitrosodipropylamine	R	<100	<110	R	<230	<10800	R	<110	<1000	R
N-Nitrosopiperidine	R	<120	<120	R	<230	<10800	R	<110	<1100	R
Naphthalene	R	120	<120	R	<230	<10800	R	350	<1100	R
Nitrobenzene	R	<100	<110	R	<230	<10800	R	<110	<1000	R
Pentachlorobenzene	R	<130	<130	R	<390	<18400	R	<110	<1200	R

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(0) SAMPLE LOCATION SAMPLE DATE	SM010-TB05-0305 3.00-5.00 TB05 6/26/1997	SM010-TB05-0305 3.00-5.00 TB05 11/11/1999	SM010-TB05-0507 5.00-7.00 TB05 11/11/1999	SM010-TB05-0709 7.00-9.00 TB05 6/26/1997	SM010-TB05-1214 12.00-14.00 TB05 7/14/1997	SM010-TB06-0001 0.00-1.00 TB06 6/25/1997	SM010-TB06-0305 3.00-5.00 TB06 6/25/1997	SM010-TB06-0305 3.00-5.00 TB06 11/11/1999	SM010-TB06-0507 5.00-7.00 TB06 11/11/1999	SM010-TB06-0709 7.00-9.00 TB06 6/25/1997
PARAMETER										
Pentachloronitrobenzene	R	<81	<85	R	<230	<10800	R	<83	<790	R
Pentachlorophenol	R	<290	<300	R	<230	<10800	R	<300	<2800	R
Phenacetin	R	<100	<110	R	<230	<10800	R	<110	<1000	R
Phenanthrene	R	130	<120	R	<230	<10800	R	380	<1100	R
Phenol	R	<120	<120	R	<140	<6500	R	<120	<1100	R
Pyrene	R	<130	<130	R	<230	<10800	R	<120	<1200	R
Pyridine	R	<100	<110	R	<250	<11900	R	<130	<1000	R
Trimethylphosphate	R	<100	<110	R	<230	<10800	R	<110	<1000	R
Triphenylphosphate	R	<150	<110	R	<1160	<54200	R	<150	<1500	R
m,p-Cresol	R	<210	<220	R	<350	<16300	R	<210	<2000	R
m-Nitrotoluene	R	<120	<120	R	<230	<10800	R	<120	<1100	R
m-Toluidine	R	<93	<98	R	<460	<21700	R	<95	<900	R
o,p-Toluidine	R	<81	<85	R	<1180	<55200	R	<83	<790	R
o-Cresol	R	<93	<98	R	<230	<10800	R	<95	<900	R
o-Nitrotoluene	R	<130	<13	R	<230	<10800	R	<120	<1200	R
p-Chloroaniline	R	<930	<98	R	1220	<10800	R	<95	<900	R
p-Dimethylaminoazobenzene	R	<150	<160	R	<230	<10800	R	<150	<1500	R
p-Nitrotoluene	R	<100	<110	R	<350	<16300	R	<110	<1000	R
Metals (µg/kg)										
Antimony	<469	NA	NA	<473	<463	<433	<478	NA	NA	<475
Cadmium	789	NA	NA	<462	766	980	1105	NA	NA	14463
Chromium	17893	NA	NA	25064	45815	14966	16549	NA	NA	18385
Lead	16521	NA	NA	16430	18019	15507	13954	NA	NA	20099
Nickel	30510	NA	NA	35805	69625	27133	28494	NA	NA	59123
Miscellaneous (µg/kg)										
Percent Moisture	14.7%	13.7%	18%	15.5%	13.6%	7.67%	16.3%	15.5%	11.5%	15.7%
Total Organic Carbon	NA	NA	NA	NA	3400000 J	NA	NA	NA	NA	NA
BTU from ECD	NA	NA	NA	NA	<500 BTU	NA	NA	NA	NA	NA
Ignitability (Flash Point) for S	NA	NA	NA	NA	Negative	NA	NA	NA	NA	NA
Percent Ash	NA	NA	NA	NA	69 %	NA	NA	NA	NA	NA
pH in Water (Solid Sample)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

NA=Not analyzed
 B=Blank contamination
 J=Estimated concentration
 K=Estimated concentration (high)
 R=Rejected data, additional information
 U=Nondetect at reported limit
 <=Nondetect at reported limit

BTL 4.5-1
tical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB07-0001	SM010-TB07-0305	SM010-TB07-0709	SM010-TB07-1113	SM010-TB07-1517	SM010-TB08-0001	SM010-TB08-0305	SM010-TB08-0709	SM010-TB08-1315	SM010-TB09-0001
SAMPLE DEPTH (ft)	0.00-1.00	3.00-5.00	7.00-9.00	11.00-13.00	15.00-17.00	0.00-1.00	3.00-5.00	7.00-9.00	13.00-15.00	0.00-1.00
SAMPLE LOCATION	TB07	TB07	TB07	TB07	TB07	TB08	TB08	TB08	TB08	TB09
PARAMETER										
Volatiles ($\mu\text{g}/\text{kg}$)										
1,1,1,2-Tetrachloroethane	< 268	< 294	< 292	< 639	< 314	< 268	< 293	< 310	< 311	< 291
1,1,1-Trichloroethane	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
1,1,2,2-Tetrachloroethane	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
1,1,2-Trichloroethane	< 268	< 294	< 292	< 639	< 314	< 268	< 293	< 310	< 311	< 291
1,1-Dichloroethane	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
1,1-Dichloroethene	< 268	< 294	< 292	< 639	< 314	< 268	1290	2730	2370	< 291
1,1-Dichloropropene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
1,2,3-Trichlorobenzene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
1,2,3-Trichloropropane	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
1,2,4-Trichlorobenzene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
1,2,4-Trimethylbenzene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
1,2-Dibromo-3-chloropropane	< 268	< 294	< 292	< 639	< 314	< 268	< 293	< 310	< 311	< 291
1,2-Dibromoethane	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
1,2-Dichlorobenzene	< 268	29400	15200	358000	42800	344 J	457 J	372 J	834	513 J
1,2-Dichloroethane	< 268	< 294	< 292	< 639	< 314	< 268	< 293	< 310	< 311	< 291
1,2-Dichloropropane	< 408	< 447	< 444	< 959	< 478	< 408	< 445	< 471	< 473	< 443
1,3,5-Trimethylbenzene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
1,3-Dichlorobenzene	< 268	< 294	< 292	< 639	< 314	< 268	< 293	< 310	< 311	< 291
1,3-Dichloropropane	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
1,4-Dichlorobenzene	< 268	765	386 J	8570	1380	< 268	< 293	< 310	324 J	< 291
2,2-Dichloropropane	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
2-Butanone (MEK)	< 944	< 1040	< 1030	< 2300	< 1110	< 945	< 1030	< 1090	< 1100	< 1030
2-Chloroethyl Vinyl Ether	< 268	< 294	< 292	< 639	< 314	< 268	< 293	< 310	< 311	< 291
2-Chlorotoluene	< 139	< 153	< 152	499 J	< 164	< 140	< 152	< 161	< 162	< 152
2-Hexanone	< 408	< 447	< 444	< 959	< 478	< 408	< 445	< 471	< 473	< 443
4-Chlorotoluene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
4-Methyl-2-pentanone (MIK)	< 408	< 447	< 444	< 959	< 478	< 408	< 445	< 471	< 473	< 443
Acetone	< 944	< 1040	< 1030	< 2300	< 1110	< 945	< 1030	< 1090	< 1100	< 1030
Acrolein	< 2680	< 2940	< 2920	< 6390	< 3140	< 2680	< 2930	< 3100	< 3110	< 2910
Acrylonitrile	< 1390	< 1530	< 1520	< 3200	< 1640	< 1400	< 1520	< 1610	< 1620	< 1520
Allyl Chloride	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
Benzene	< 139	4000	398 J	52400	11300	2360	< 152	211 J	162 J	< 152 J
Bromobenzene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
Bromochloromethane	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
Bromodichloromethane	< 268	< 294	< 292	< 639	< 314	< 268	< 293	< 310	< 311	< 291
Bromoform	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
Bromomethane	< 408	< 447	< 444	< 959	< 478	< 408	< 445	< 471	< 473	< 443
Carbon Disulfide	< 408	< 447	< 444	< 959	< 478	< 408	< 445	< 471	< 473	< 443
Carbon Tetrachloride	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
Chlorobenzene	< 139	4470	1750	29400	6290	< 140	< 152	335 J	2740	233 J
Chloroethane	< 408	< 447	< 444	< 959	< 478	< 408	< 445	< 471	< 473	< 443
Chloroform	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
Chloromethane	< 268	< 294	< 292	< 639	< 314	< 268	< 293	< 310	< 311	< 291
Dibromochloromethane	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
Dibromomethane	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
Dichlorodifluoromethane	< 268	< 294	< 292	< 639	< 314	< 268	< 293	< 310	< 311	< 291
Ethyl Methacrylate	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
Ethylbenzene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
Freon 113	< 268	< 294	< 292	1110 J	< 314	< 268	< 293	< 310	< 311	455 J
Freon 141b	< 139	< 153	< 152	< 320	< 164	< 140	2110	5200	3860	< 152
Hexachlorobutadiene	< 268	< 294	< 292	< 639	< 314	< 268	< 293	< 310	< 311	< 291
Isopropylbenzene	< 408	< 447	< 444	< 959	< 478	< 408	< 445	< 471	< 473	< 443
Methyl Iodide	< 408	< 447	< 444	< 959	< 478	< 408	< 445	< 471	< 473	< 443
Methylene Chloride	< 268	< 294	< 292	< 639	< 314	< 268	< 293	< 310	< 311	< 291

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB07-0001 0.00-1.00 TB07 7/3/1997	SM010-TB07-0305 3.00-5.00 TB07 7/3/1997	SM010-TB07-0709 7.00-9.00 TB07 7/3/1997	SM010-TB07-1113 11.00-13.00 TB07 7/3/1997	SM010-TB07-1517 15.00-17.00 TB07 7/3/1997	SM010-TB08-0001 0.00-1.00 TB08 7/1/1997	SM010-TB08-0305 3.00-5.00 TB08 7/1/1997	SM010-TB08-0709 7.00-9.00 TB08 7/1/1997	SM010-TB08-1315 13.00-15.00 TB08 7/14/1997	SM010-TB09-0001 0.00-1.00 TB09 6/30/1997
PARAMETER										
Naphthalene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
Styrene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
Tetrachloroethene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
Toluene	< 139	2710	491 J	70300	7920	955	< 152	< 161	< 162	< 152 J
Trichloroethene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
Trichlorofluoromethane	< 268	< 294	< 292	74200	2890	1400	1290	3100	1370	< 291
Vinyl Acetate	< 408	< 447	< 444	< 959	< 478	< 408	< 445	< 471	< 473	< 443
Vinyl Chloride	< 268	< 294	< 292	< 639	< 314	< 268	< 293	< 310	< 311	< 291
cis-1,2-Dichloroethene	< 268	< 294	< 292	< 639	< 314	< 268	< 293	< 310	< 311	< 291
cis-1,3-Dichloropropene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
m+p-Xylene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
n-Butylbenzene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
n-Propylbenzene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
o-Xylene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
p-Isopropyltoluene	< 139	812	363 J	6910	377 J	< 140	< 152	< 161	386 J	< 152 J
sec-Butylbenzene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
tert-Butylbenzene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
trans-1,2-Dichloroethene	< 268	< 294	< 292	< 639	< 314	< 268	< 293	< 310	< 311	< 291
trans-1,3-Dichloropropene	< 139	< 153	< 152	< 320	< 164	< 140	< 152	< 161	< 162	< 152
trans-1,4-Dichloro-2-butene	< 1390	< 1530	< 1520	< 3200	< 1640	< 1400	< 1520	< 1610	< 1620	< 1520
Semivolatiles (µg/kg)										
1,2,3-Trichlorobenzene	< 260	< 2820	< 1400 J	< 3070	< 3020	< 260 J	< 280 J	< 300 J	< 300	< 2800
1,2,4,5-Tetrachlorobenzene	< 260	< 2820	< 1400 J	< 3070	< 3020	< 260 J	< 280 J	< 300 J	< 300	< 2800
1,2,4-Trichlorobenzene	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
1,2-Dichlorobenzene	260	25900	13300 J	60600	18900	420 J	< 230 J	< 250 J	860	< 2330
1,3-Dichlorobenzene	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
1,4-Dichlorobenzene	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
1-Chloronaphthalene	< 540	< 5880	< 2920 J	< 6390	< 6290	< 540 J	< 590 J	< 620 J	< 620	< 5830
1-Methylnaphthalene	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
1-Naphthylamine	< 730	< 8000	< 3980 J	< 8700	< 8550	< 730 J	< 800 J	< 840 J	< 850	< 7930
2,3,4,6-Tetrachlorophenol	< 430	< 4710	< 2340 J	< 5120	< 5030	< 430 J	< 470 J	< 500 J	< 500	< 4660
2,3-Dichloroaniline	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
2,4,5-Trichlorophenol	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
2,4,6-Trichlorophenol	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
2,4-Dichlorophenol	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
2,4-Dimethylphenol	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
2,4-Dinitrophenol	< 1330	< 14600	< 7250 J	< 15900	< 15600	< 1330 J	< 1450 J	< 1540 J	< 1540	< 14500
2,4-Dinitrotoluene	< 210	126000	70800 J	171000	95400	450 J	< 230 J	< 250 J	< 250	< 2330
2,4-Toluenediamine	< 1070	< 11800	< 5850 J	< 12800	< 12600	< 1070 J	< 1170 J	< 1240 J	< 1250	< 11700
2,6-Dichlorophenol	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
2,6-Dinitrotoluene	< 210	32700	17800 J	35800	21100	< 210 J	< 230 J	< 250 J	< 250	< 2330
2-Chloronaphthalene	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
2-Chlorophenol	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
2-Methylnaphthalene	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
2-Naphthylamine	< 820	< 8940	< 4440 J	< 9720	< 9560	< 820 J	< 890 J	< 940 J	< 950	< 8860
2-Nitroaniline	< 260	< 2820	< 1400 J	< 3070	< 3020	< 260 J	< 280 J	< 300 J	< 300	< 2800
2-Nitrodiphenylamine	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
2-Nitrophenol	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
2-Picoline	< 790	< 8710	< 4330 J	< 9460	< 9310	< 790 J	< 870 J	< 920 J	< 920	< 8620
3,3'-Dichlorobenzidine	< 1310	< 14400	< 7130 J	< 15600	< 15400	< 1310 J	< 1430 J	< 1510 J	< 1520	< 14200
3-Methylcholanthrene	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
3-Nitroaniline	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
4,4' Methyleneedianiline	< 1890	< 20700	< 10300 J	< 22500	< 22100	< 1890 J	< 2060 J	< 2180 J	< 2190	< 20500
4,6-Dinitro-o-cresol	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330

ILE 4.5-1
tical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB07-0001	SM010-TB07-0305	SM010-TB07-0709	SM010-TB07-1113	SM010-TB07-1517	SM010-TB08-0001	SM010-TB08-0305	SM010-TB08-0709	SM010-TB08-1315	SM010-TB09-0001
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	7.00-9.00	11.00-13.00	15.00-17.00	0.00-1.00	3.00-5.00	7.00-9.00	13.00-15.00	0.00-1.00
SAMPLE LOCATION	TB07	TB07	TB07	TB07	TB07	TB08	TB08	TB08	TB08	TB09
SAMPLE DATE	7/3/1997	7/3/1997	7/3/1997	7/3/1997	7/3/1997	7/1/1997	7/1/1997	7/1/1997	7/14/1997	6/30/1997
PARAMETER										
4-Aminobiphenyl	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
4-Aminodiphenylamine	<540	<5880	<2920 J	<6390	<6290	<540 J	<590 J	<620 J	<620	<5830
4-Bromophenyl phenyl ether	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
4-Chloro-m-cresol	230	<2350	<1170 J	<2560	<2520	340 J	300 J	<250 J	<250	<2330
4-Chlorophenylphenyl ether	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
4-Nitroaniline	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
4-Nitrophenol	<210 J	<2350 J	<1170 J	<2560 J	<2520 J	<210 J	<230 J	<250 J	<250 J	<2330 J
5-Nitro-o-toluidine	<210	2350	<1170 J	29400	7870	<210 J	<230 J	<250 J	<250	<2330
7,12-dimethylbenz[a]anthracene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Acenaphthene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Acenaphthylene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Acetophenone	<280	<3060	<1520 J	<3320	<3270	<280 J	<300 J	<320 J	<320	<3030
Aniline	<300	<3290	<1640 J	40200	<3520	<300 J	<330 J	<350 J	<350	<3260
Anthracene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Azobenzene	<260	<2820	<1400 J	<3070	<3020	<260 J	<280 J	<300 J	<300	<2800
Benzidine	<3430	<37700	<18700 J	<40900	<40300	<3440 J	<3750 J	<3970 J	<3990	<37300
Benzo(a)anthracene	<280	<3060	<1520 J	<3320	<3270	<280 J	<300 J	<320 J	<320	<3030
Benzo(a)pyrene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Benzo(b)fluoranthene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Benzo(ghi)perylene	<240	<2590	<1290 J	<2810	<2770	<240 J	<260 J	<270 J	<270	<2560
Benzo(k)fluoranthene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Benzoic Acid	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Benzyl Alcohol	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Benzyl butyl phthalate	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Bis(2-chloroethoxyethane)	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Bis(2-chloroethyl)ether	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Bis(2-chloroisopropyl)ether	<210 J	<2350 J	<1170 J	<2560 J	<2520 J	<210 J	<230 J	<250 J	<250 J	<2330 J
Bis(2-ethylhexyl) phthalate	<260	<2820	<1400 J	<3070	<3020	490 JB	340 JB	570 JB	600 B	<2800
Bisphenol A	<390	<4240	<2110 J	<4600	<4530	<390 J	<420 J	<450 J	<450	<4200
Carbazole	<1070	<11800	<5850 J	<12800	<12600	<1070 J	<1170 J	<1240 J	R	<11700
Chrysene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Cyclohexanone	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Di-n-butyl phthalate	<210 J	<2350 J	<1170 J	<2560 J	<2520 J	1960 JB	1740 JB	2550 JB	3340 JB	<2330 J
Di-n-octyl phthalate	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Dibenzo(a,h)anthracene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Dibenzo furan	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Diethyl Phthalate	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Dimethylphthalate	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Ethyl Methane Sulfonate	<390	<4240	<2110 J	<4600	<4530	<390 J	<420 J	<450 J	<450	<4200
Fluoranthene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Fluorene	<210 J	<2350 J	<1170 J	<2560 J	<2520 J	<210 J	<230 J	<250 J	<250 J	<2330 J
Heptachlor	<240	<2590	<1290 J	<2810	<2770	<240 J	<260 J	<270 J	R	<2560
Hexachlorobenzene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Hexachlorobutadiene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Hexachlorocyclopentadiene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Hexachloroethane	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Indeno(1,2,3-cd)pyrene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Isophorone	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Methyl methane sulfonate	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
N-Nitrosodibutylamine	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
N-Nitrosodimethylamine	<210 J	<2350 J	<1170 J	<2560 J	<2520 J	<210 J	<230 J	<250 J	<250 J	<2330 J
N-Nitrosodiphenylamine	<280	<3060	<1520 J	<3320	<3270	<280 J	<300 J	<320 J	<320	<3030
N-Nitrosodipropylamine	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
N-Nitrosopiperidine	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Naphthalene	<210	<2350	<1170 J	<2560	<2520	<210 J	<230 J	<250 J	<250	<2330
Nitrobenzene	<210	215000	98000 J	234000	142000	220 J	<230 J	<250 J	<250	<2330
Pentachlorobenzene	<360	<4000	<1990 J	<4350	<4280	<360 J	<400 J	<420 J	<420	<3960

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB07-0001 0.00-1.00 TB07 7/3/1997	SM010-TB07-0305 3.00-5.00 TB07 7/3/1997	SM010-TB07-0709 7.00-9.00 TB07 7/3/1997	SM010-TB07-1113 11.00-13.00 TB07 7/3/1997	SM010-TB07-1517 15.00-17.00 TB07 7/3/1997	SM010-TB08-0001 0.00-1.00 TB08 7/1/1997	SM010-TB08-0305 3.00-5.00 TB08 7/1/1997	SM010-TB08-0709 7.00-9.00 TB08 7/1/1997	SM010-TB08-1315 13.00-15.00 TB08 7/14/1997	SM010-TB09-0001 0.00-1.00 TB09 6/30/1997
PARAMETER										
Pentachloronitrobenzene	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
Pentachlorophenol	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
Phenacetin	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
Phenanthrene	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
Phenol	1130	< 1410	< 700 J	< 1530	< 1510	1260 JB	< 140 J	< 150 J	< 150	< 1400
Pyrene	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
Pyridine	< 240	< 2590	< 1290 J	< 2810	< 2770	< 240 J	< 260 J	< 270 J	< 270	< 2560
Trimethylphosphate	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
Triphenylphosphate	< 1070	< 11800	< 5850 J	< 12800	< 12600	< 1070 J	< 1170 J	< 1240 J	< 1250	< 11700
m,p-Cresol	< 320	< 3530	< 1750 J	< 3840	< 3770	< 320 J	< 350 J	< 370 J	< 370	< 3500
m-Nitrotoluene	< 210	2960	1940 J	4040	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
m-Toluidine	< 430	< 4710	< 2340 J	< 5120	< 5030	< 430 J	< 470 J	< 500 J	< 500	< 4660
o,p-Toluidine	< 1090	< 12000	< 5960 J	< 13000	< 12800	< 1090 J	< 1200 J	< 1260 J	< 1270	< 11900
o-Cresol	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
o-Nitrotoluene	< 210	40700	20500 J	42700	26700	< 210 J	< 230 J	< 250 J	< 250	< 2330
p-Chloroaniline	< 210	< 2350	< 1170 J	< 2560	< 2520	430 J	< 230 J	< 250 J	< 250	< 2330
p-Dimethylaminoazobenzene	< 210	< 2350	< 1170 J	< 2560	< 2520	< 210 J	< 230 J	< 250 J	< 250	< 2330
p-Nitrotoluene	< 320	32000	17100 J	40700	21500	< 320 J	< 350 J	< 370 J	< 370	< 3500
Metals (µg/kg)										
Antimony	< 429	< 471	< 468	< 512	< 503	< 429	< 469	< 496	< 498	< 466
Cadmium	668	628	< 458	736	909	865	625	< 477	610	1590
Chromium	6811	12087	9538	18148	14352	18410	16769	17024	16722	21698
Lead	7268	11615	9122	23752	13931	19648	17082	15601	16116	35455
Nickel	27939	41596	20427	52934	48128	43659	33492	23955	26202	186260
Miscellaneous (µg/kg)										
Percent Moisture	6.76%	15.0%	14.5%	21.8%	20.5%	6.85%	14.7%	19.3%	19.7%	14.2%
Total Organic Carbon	NA	NA	NA	NA	NA	5800000	4400000	NA	5700000	NA
BTU from ECD	NA	NA	NA	NA	NA	NA	< 500 BTU	NA	< 500 BTU	NA
Ignitability (Flash Point) for S	NA	NA	NA	NA	NA	NA	Negative	NA	Negative	NA
Percent Ash	NA	NA	NA	NA	NA	NA	65 %	NA	59 %	NA
pH in Water (Solid Sample)	NA	NA	NA	NA	NA	NA	7.2 std	NA	NA	NA

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, additional information

U=Nondetect at reported limit

<=Nondetect at reported limit

Table 4.5-1
Chemical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB09-0305 3.00-5.00 TB09 6/30/1997	SM010-TB09-1113 11.00-13.00 TB09 6/30/1997	SM010-TB09-1113FD 11.00-13.00 TB09 6/30/1997	SM010-TB09-1517 15.00-17.00 TB09 6/30/1997	SM010-TB10-0001 0.00-1.00 TB10 6/30/1997	SM010-TB10-0001 0.00-1.00 TB10 11/12/1999	SM010-TB10-0305 3.00-5.00 TB10 6/30/1997	SM010-TB10-1820 18.00-20.00 TB10 6/30/1997	SM010-TB11-0001 0.00-1.00 TB11 6/30/1997	SM010-TB11-0305 3.00-5.00 TB11 6/30/1997
PARAMETER										
Volatiles ($\mu\text{g}/\text{kg}$)										
1,1,1,2-Tetrachloroethane	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
1,1,1-Trichloroethane	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
1,1,2,2-Tetrachloroethane	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
1,1,2-Trichloroethane	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
1,1-Dichloroethane	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
1,1-Dichloroethene	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
1,1-Dichloropropene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
1,2,3-Trichlorobenzene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
1,2,3-Trichloropropane	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
1,2,4-Trichlorobenzene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
1,2,4-Trimethylbenzene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
1,2-Dibromo-3-chloropropane	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
1,2-Dibromoethane	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
1,2-Dichlorobenzene	4490 J	712 J	569 J	1590	817 J	NA	68700 J	2370 J	2240	4130
1,2-Dichloroethane	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
1,2-Dichloropropane	< 461	< 451	< 451	< 465	< 403	NA	< 954	< 499	< 426	< 491
1,3,5-Trimethylbenzene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
1,3-Dichlorobenzene	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
1,3-Dichloropropane	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
1,4-Dichlorobenzene	449 J	< 297	< 297	< 306	< 265	NA	4450	749 J	< 280	465 J
2,2-Dichloropropane	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
2-Butanone (MEK)	< 1070	< 1040	< 1040	< 1080	< 933	NA	< 2290	< 1160	< 987	< 1140
2-Chloroethyl Vinyl Ether	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
2-Chlorotoluene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
2-Hexanone	< 461	< 451	< 451	< 465	< 403	NA	< 954	< 499	< 426	< 491
4-Chlorotoluene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
4-Methyl-2-pentanone (MIK)	< 461	< 451	< 451	< 465	< 403	NA	< 954	< 499	< 426	< 491
Acetone	< 1070	< 1040	< 1040	< 1080	< 933	NA	< 2290	< 1160	< 987	< 1140
Acrolein	< 3030	< 2970	< 2970	< 3060	< 2650	NA	< 6360	< 3290	< 2800	< 3230
Acrylonitrile	< 1580	< 1540	< 1540	< 1590	< 1380	NA	< 3180	< 1710	< 1460	< 1680
Allyl Chloride	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
Benzene	2180 J	1300	1540	171 J	138 J	NA	10600 J	1250 J	< 146	< 168
Bromobenzene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
Bromochloromethane	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
Bromodichloromethane	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
Bromoform	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
Bromomethane	< 461	< 451	< 451	< 465	< 403	NA	< 954	< 499	< 426	< 491
Carbon Disulfide	< 461	< 451	< 451	< 465	< 403	NA	< 954	< 499	< 426	< 491
Carbon Tetrachloride	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
Chlorobenzene	9710 J	55800	60500	1840	414 J	NA	433000 J	5260 J	3700	14200
Chloroethane	< 461	< 451	< 451	< 465	< 403	NA	< 954	< 499	< 426	< 491
Chloroform	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
Chloromethane	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
Dibromochloromethane	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
Dibromomethane	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
Dichlorodifluoromethane	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
Ethyl Methacrylate	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
Ethylbenzene	< 158	< 154	< 154	< 159	< 138	NA	2930	< 171	< 146	< 168
Freon 113	< 303	< 297	< 297	< 306	265 J	NA	< 636	< 329	291 JB	< 323
Freon 141b	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
Hexachlorobutadiene	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
Isopropylbenzene	< 461	< 451	< 451	< 465	< 403	NA	< 954	< 499	< 426	< 491
Methyl Iodide	< 461	< 451	< 451	< 465	< 403	NA	< 954	< 499	< 426	< 491
Methylene Chloride	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB09-0305 3.00-5.00 TB09 6/30/1997	SM010-TB09-1113 11.00-13.00 TB09 6/30/1997	SM010-TB09-1113FD 11.00-13.00 TB09 6/30/1997	SM010-TB09-1517 15.00-17.00 TB09 6/30/1997	SM010-TB10-0001 0.00-1.00 TB10 6/30/1997	SM010-TB10-0001 0.00-1.00 TB10 11/12/1999	SM010-TB10-0305 3.00-5.00 TB10 6/30/1997	SM010-TB10-1820 18.00-20.00 TB10 6/30/1997	SM010-TB11-0001 0.00-1.00 TB11 6/30/1997	SM010-TB11-0305 3.00-5.00 TB11 6/30/1997
PARAMETER										
Naphthalene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
Styrene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
Tetrachloroethene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
Toluene	158 J	< 154	< 154	< 159	< 138 J	NA	1060 J	< 171 J	< 146	< 168
Trichloroethene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
Trichlorofluoromethane	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
Vinyl Acetate	< 461	< 451	< 451	< 465	< 403	NA	< 954	< 499	< 426	< 491
Vinyl Chloride	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
cis-1,2-Dichloroethene	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
cis-1,3-Dichloropropene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
m+p-Xylene	< 158	< 154	< 154	< 159	< 138	NA	9290	< 171	< 146	258 J
n-Butylbenzene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
n-Propylbenzene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
o-Xylene	< 158	< 154	< 154	< 159	< 138	NA	2290	< 171	< 146	< 168
p-Isopropyltoluene	279 J	< 154	< 154	< 159	< 138 J	NA	17800 J	< 171 J	168 J	401 J
sec-Butylbenzene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
tert-Butylbenzene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
trans-1,2-Dichloroethene	< 303	< 297	< 297	< 306	< 265	NA	< 636	< 329	< 280	< 323
trans-1,3-Dichloropropene	< 158	< 154	< 154	< 159	< 138	NA	< 318	< 171	< 146	< 168
trans-1,4-Dichloro-2-butene	< 1580	< 1540	< 1540	< 1590	< 1380	NA	< 3180	< 1710	< 1460	< 1680
Semivolatiles (µg/kg)										
1,2,3-Trichlorobenzene	< 2910 J	< 280	< 280	< 290 J	R	< 1200	< 15300	< 320 J	< 2690	< 3100
1,2,4,5-Tetrachlorobenzene	3130 J	< 280	< 280	< 290 J	R	< 1300	< 15300	< 320 J	< 2690	< 3100
1,2,4-Trichlorobenzene	4590 J	< 240	< 240	< 240 J	R	< 1200	< 12700	< 260 J	< 2240	< 2580
1,2-Dichlorobenzene	108000 J	9870	8490	4800 J	R	18000	61100	1170 JB	7050	25200
1,3-Dichlorobenzene	< 2430 J	< 240	< 240	< 240 J	R	< 98	< 12700	< 260 J	< 2240	< 2580
1,4-Dichlorobenzene	11000 J	890	860	360 J	R	1300	37000	< 260 J	< 2240	< 2580
1-Chloronaphthalene	< 6070 J	< 590	< 590	< 610 J	R	< 1100	< 31800	< 660 J	< 5610	< 6460
1-Methylnaphthalene	< 2430 J	< 240	< 240	< 240 J	R	< 120	< 12700	< 260 J	< 2240	< 2580
1-Naphthylamine	< 8250 J	< 810	< 810	1050 J	R	< 9400	< 43300	< 890 J	< 7620	< 8790
2,3,4,6-Tetrachlorophenol	< 4850 J	< 470	< 470	< 490	R	< 980	< 25500	< 530 J	< 4480	< 5170
2,3-Dichloroaniline	< 2430 J	< 240	< 240	< 240 J	R	< 1200	< 12700	< 260 J	< 2240	< 2580
2,4,5-Trichlorophenol	< 2430 J	< 240	< 240	< 240	R	< 980	< 12700	< 260 J	< 2240	< 2580
2,4,6-Trichlorophenol	< 2430 J	< 240	< 240	< 240	R	< 1200	< 12700	< 260 J	< 2240	< 2580
2,4-Dichlorophenol	< 2430 J	< 240	< 240	< 240	R	< 1300	< 12700	< 260 J	< 2240	< 2580
2,4-Dimethylphenol	< 2430 J	< 240	< 240	< 240	R	< 1300	< 12700	< 260 J	< 2240	< 2580
2,4-Dinitrophenol	< 15100 J	< 1470	< 1470	< 1520	R	< 8600	< 78900	< 1630 J	< 13900	< 16000
2,4-Dinitrotoluene	23200 J	< 240	< 240	< 240 J	R	1,400	< 12700	< 260 J	< 2240	< 2580
2,4-Toluenediamine	< 12100 J	< 1190	< 1190	< 1220 J	R	< 7000	< 63600	< 1310 J	R	< 12900
2,6-Dichlorophenol	< 2430 J	< 240	< 240	< 240	R	< 1300	< 12700	< 260 J	< 2240	< 2580
2,6-Dinitrotoluene	< 2430 J	< 240	< 240	< 240 J	R	< 1300	< 12700	< 260 J	< 2240	< 2580
2-Chloronaphthalene	< 2430 J	480	530	< 240	R	< 1100	< 12700	< 260 J	< 2240	< 2580
2-Methylnaphthalene	< 2430 J	< 240	< 240	< 240 J	R	< 1200	< 12700	< 260 J	< 2240	< 2580
2-Naphthylamine	< 9220 J	< 900	< 900	< 930 J	R	< 7600	< 48400	< 1000 J	< 8520	< 9820
2-Nitroaniline	< 2910 J	< 280	< 280	< 290 J	R	< 1200	< 15300	< 320 J	< 2690	< 3100
2-Nitrodiphenylamine	< 2430 J	< 240	< 240	< 240 J	R	< 980	< 12700	< 260 J	< 2240	< 2580
2-Nitrophenol	< 2430 J	< 240	< 240	< 240	R	< 1100	< 12700	< 260 J	< 2240	< 2580
2-Picoline	< 8980 J	< 880	< 880	< 910 J	R	< 1100	< 47100	< 970 J	< 8300	< 9560
3,3'-Dichlorobenzidine	< 14800 J	< 1450	< 1450	< 1490 J	R	< 2900	< 77600	< 1600 J	< 13700	< 15800
3-Methylcholanthrene	< 2430 J	< 240	< 240	< 240 J	R	< 1300	< 12700	< 260 J	< 2240	< 2580
3-Nitroaniline	< 2430 J	< 240	< 240	< 240 J	R	< 730	< 12700	< 260 J	< 2240	< 2580
4,4' Methyleneedianiline	< 21400 J	< 2090	< 2090	< 2150 J	R	< 16000	413000	< 2310 J	< 19700	60200
4,6-Dinitro-o-cresol	< 2430 J	< 240	< 240	< 240	R	< 4200	< 12700	< 260 J	< 2240	< 2580

B1E 4.5-1
tical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB09-0305	SM010-TB09-1113	SM010-TB09-1113FD	SM010-TB09-1517	SM010-TB10-0001	SM010-TB10-0001	SM010-TB10-0305	SM010-TB10-1820	SM010-TB11-0001	SM010-TB11-0305
SAMPLE DEPTH(ft)	3.00-5.00	11.00-13.00	11.00-13.00	15.00-17.00	0.00-1.00	0.00-1.00	3.00-5.00	18.00-20.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB09	TB09	TB09	TB09	TB10	TB10	TB10	TB10	TB11	TB11
SAMPLE DATE	6/30/1997	6/30/1997	6/30/1997	6/30/1997	6/30/1997	11/12/1999	6/30/1997	6/30/1997	6/30/1997	6/30/1997
4-Aminobiphenyl	< 240 J	< 240	< 240	< 240 J	R	< 6000	< 12700	< 260 J	< 2240	< 2580
4-Amino diphenylamine	< 6070 J	< 590	< 590	< 610 J	R	< 1300	< 31800	< 660 J	R	< 6460
4-Bromophenyl phenyl ether	< 2430 J	< 240	< 240	< 240 J	R	< 1300	< 12700	< 260 J	< 2240	< 2580
4-Chloro-m-cresol	< 2430 J	< 240	< 240	< 240	R	< 1600	< 12700	< 260 J	< 2240	< 2580
4-Chlorophenylphenyl ether	< 2430 J	< 240	< 240	< 240 J	R	< 1200	< 12700	< 260 J	< 2240	< 2580
4-Nitroaniline	< 2430 J	< 240	< 240	< 240 J	R	< 980	< 12700	< 260 J	< 2240	< 2580
4-Nitrophenol	< 2430 J	< 240 J	< 240 J	< 240 J	R	< 3800	< 12700 J	< 260 J	< 2240 J	< 2580 J
5-Nitro-o-toluidine	3280 J	< 240	< 240	< 240 J	R	< 1100	< 12700	< 260 J	< 2240	< 2580
7,12-dimethylbenz[a]anthracene	< 2430 J	< 240	< 240	< 240 J	R	< 1700	< 12700	< 260 J	< 2240	< 2580
Acenaphthene	< 2430 J	< 240	< 240	< 240 J	R	< 1300	< 12700	< 260 J	< 2240	< 2580
Acenaphthylene	< 2430 J	< 240	< 240	< 240 J	R	< 1300	< 12700	< 260 J	< 2240	< 2580
Acetophenone	< 3160 J	< 310	< 310	< 320 J	R	< 1100	< 16500	< 340 J	< 2910	< 3360
Aniline	5510 J	1000	1280	480 J	R	< 5400	342000	< 370 J	4330	14500
Anthracene	< 2430 J	< 240	< 240	< 240 J	R	< 1100	< 12700	< 260 J	< 2240	< 2580
Azobenzene	< 2910 J	< 280	< 280	< 290 J	R	< 1300	< 15300	< 320 J	< 2690	< 3100
Benzidine	< 38800 J	< 3800	< 3800	< 3920 J	R	< 16000	< 204000	< 4210 J	< 35900	< 41300
Benzo(a)anthracene	< 3160 J	< 310	< 310	< 320 J	R	< 1300	< 16500	< 340 J	< 2910	< 3360
Benzo(a)pyrene	< 2430 J	< 240	< 240	< 240 J	R	< 1300	< 12700	< 260 J	< 2240	< 2580
Benzo(b)fluoranthene	< 2430 J	< 240	< 240	< 240 J	R	< 1100	< 12700	< 260 J	< 2240	< 2580
Benzo(ghi)perylene	< 2670 J	< 260	< 260	< 270 J	R	< 2200	< 14000	< 290 J	< 2470	< 2840
Benzo(k)fluoranthene	< 2430 J	< 240	< 240	< 240 J	R	< 1500	< 12700	< 260 J	< 2240	< 2580
Benzoic Acid	< 2430 J	< 240	< 240	< 240	R	< 1300	< 12700	< 260 J	< 2240	< 2580
Benzyl Alcohol	< 2430 J	< 240	< 240	< 240	R	< 1100	< 12700	< 260 J	< 2240	< 2580
Benzyl butyl phthalate	< 2430 J	< 240	< 240	< 240 J	R	< 1200	< 12700	< 260 J	< 2240	< 2580
Bis(2-chloroethoxymethane)	< 2430 J	< 240	< 240	< 240 J	R	< 1200	< 12700	< 260 J	< 2240	< 2580
Bis(2-chloroethyl)ether	< 2430 J	< 240	< 240	< 240 J	R	< 1100	< 12700	< 260 J	< 2240	< 2580
Bis(2-chloroisopropyl)ether	< 2430 J	< 240 J	1450 J	< 240 J	R	< 1100	< 12700 J	< 260 J	< 2240 J	< 2580 J
Bis(2-ethylhexyl) phthalate	< 2910 J	330	< 280	480 J	R	< 1300	< 15300	600 JB	< 2690	< 3100
Bisphenol A	113000 J	8190	5010	6320 J	3520 JB	34000	191000	< 470 J	131000	158000
Carbazole	< 12100 J	< 1190	< 1190	< 1220 J	R	< 860	< 63600	< 1310 J	< 11200	< 12900
Chrysene	< 2430 J	< 240	< 240	< 240 J	R	< 1300	< 12700	< 260 J	< 2240	< 2580
Cyclohexanone	< 2430 J	< 240	< 240	< 240 J	R	< 610	26000	< 260 J	< 2240	< 2580
Di-n-butyl phthalate	< 2430 J	600 J	660 J	1730 J	R	< 1100	< 12700 J	2220 JB	< 2240 J	< 2580 J
Di-n-octyl phthalate	< 2430 J	< 240	< 240	< 240 J	R	< 1500	< 12700	< 260 J	< 2240	< 2580
Dibenzo(a,h)anthracene	< 2430 J	< 240	< 240	< 240 J	R	< 1600	< 12700	< 260 J	< 2240	< 2580
Dibenzofuran	< 2430 J	< 240	< 240	< 240 J	R	< 1100	< 12700	< 260 J	< 2240	< 2580
Diethyl Phthalate	< 2430 J	< 240	< 240	< 240 J	R	2500	< 12700	< 260 J	< 2240	< 2580
Dimethylphthalate	< 2430 J	< 240	< 240	< 240 J	R	< 1100	42600	< 260 J	< 2240	< 2580
Ethyl Methane Sulfonate	< 4370 J	< 430	< 430	< 440 J	R	< 980	< 22900	2440 J	< 4040	< 4650
Fluoranthene	< 2430 J	< 240	< 240	< 240 J	R	< 1200	< 12700	< 260 J	< 2240	< 2580
Fluorene	< 2430 J	< 240 J	< 240 J	< 240 J	R	< 1300	< 12700 J	< 260 J	< 2240 J	< 2580 J
Heptachlor	< 2670 J	< 260	< 260	< 270 J	R	< 980	< 14000	< 290 J	< 2470	< 2840
Hexachlorobenzene	< 2430 J	< 240	< 240	< 240 J	R	< 1700	< 12700	< 260 J	< 2240	< 2580
Hexachlorobutadiene	< 2430 J	< 240	< 240	< 240 J	R	< 1100	< 12700	< 260 J	< 2240	< 2580
Hexachlorocyclopentadiene	< 2430 J	< 240	< 240	< 240 J	R	< 17000	< 12700	< 260 J	< 2240	< 2580
Hexachloroethane	< 2430 J	< 240	< 240	< 240 J	R	< 1100	< 12700	< 260 J	< 2240	< 2580
Indeno(1,3,2-cd)pyrene	< 2430 J	< 240	< 240	< 240 J	R	< 1700	< 12700	< 260 J	< 2240	< 2580
Isophorone	< 2430 J	< 240	< 240	< 240 J	R	< 1500	< 12700	< 260 J	< 2240	< 2580
Methyl methane sulfonate	< 2430 J	< 240	< 240	< 240 J	R	< 1200	< 12700	< 260 J	< 2240	< 2580
N-Nitrosodibutylamine	< 2430 J	< 240	< 240	< 240 J	R	< 1500	< 12700	< 260 J	< 2240	< 2580
N-Nitrosodimethylamine	< 2430 J	< 240 J	< 240 J	< 240 J	R	< 1100	< 12700 J	< 260 J	< 2240 J	< 2580 J
N-Nitrosodiphenylamine	< 3160 J	< 310	< 310	< 320 J	R	< 3400	< 16500	< 340 J	< 2910	< 3360
N-Nitrosodipropylamine	< 2430 J	< 240	< 240	< 240 J	R	< 1100	< 12700	< 260 J	< 2240	< 2580
N-Nitrosopiperidine	< 2430 J	< 240	< 240	< 240 J	R	< 1200	< 12700	< 260 J	< 2240	< 2580
Naphthalene	< 2430 J	< 240	< 240	< 240 J	R	< 1200	< 12700	< 260 J	< 2240	< 2580
Nitrobenzene	< 2430 J	< 240	< 240	< 240 J	R	< 1100	< 12700	< 260 J	< 2240	< 2580
Pentachlorobenzene	< 4130 J	< 400	< 400	< 400	R	< 1300	< 21600	< 450 J	< 3810	< 4390

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

PARAMETER	SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB09-0305 3.00-5.00 TB09 6/30/1997	SM010-TB09-1113 11.00-13.00 TB09 6/30/1997	SM010-TB09-1113FD 11.00-13.00 TB09 6/30/1997	SM010-TB09-1517 15.00-17.00 TB09 6/30/1997	SM010-TB10-0001 0.00-1.00 TB10 6/30/1997	SM010-TB10-0001 0.00-1.00 TB10 11/12/1999	SM010-TB10-0305 3.00-5.00 TB10 6/30/1997	SM010-TB10-1820 18.00-20.00 TB10 6/30/1997	SM010-TB11-0001 0.00-1.00 TB11 6/30/1997	SM010-TB11-0305 3.00-5.00 TB11 6/30/1997
Pentachloronitrobenzene	< 2430 J	< 240	< 240	< 240 J	R	< 860	< 12700	< 260 J	< 2240	< 2580	
Pentachlorophenol	< 2430 J	< 240	< 240	< 240	R	< 100	< 12700	< 260 J	< 2240	< 2580	
Phenacetin	< 2430 J	< 240	< 240	< 240 J	R	< 1100	< 12700	< 260 J	< 2240	< 2580	
Phenanthrene	< 2430 J	< 240	< 240	< 240 J	R	< 1200	< 12700	< 260 J	< 2240	< 2580	
Phenol	2140 J	420	530	< 150	R	< 1200	< 7630	340 J	< 1350	< 1550	
Pyrene	< 2430 J	< 240	< 240	< 240 J	R	< 1300	< 12700	< 260 J	< 2240	< 2580	
Pyridine	< 2670 J	< 260	< 260	< 270 J	R	< 1100	< 14000	< 290 J	< 2470	< 2840	
Trimethylphosphate	< 2430 J	< 240	< 240	< 240 J	R	< 1100	< 12700	< 260 J	< 2240	< 2580	
Triphenylphosphate	< 12100 J	< 1190	< 1190	< 1220 J	R	< 1600	< 63600	< 1310 J	< 11200	< 12900	
m,p-Cresol	< 3640 J	< 360	< 360	< 370	R	< 2200	< 19100	< 390 J	< 3360	< 3880	
m-Nitrotoluene	< 2430 J	< 240	< 240	< 240 J	R	< 1200	< 12700	< 260 J	< 2240	< 2580	
m-Toluidine	< 4850 J	< 470	< 470	< 490 J	R	< 980	< 25500	< 530 J	< 4480	< 5170	
o,p-Toluidine	< 12400 J	< 1210	< 1210	< 1250 J	R	1600	< 64900	< 1340 J	< 11400	< 13200	
o-Cresol	< 2430 J	< 240	< 240	< 240	R	< 980	< 12700	< 260 J	< 2240	< 2580	
o-Nitrotoluene	< 2430 J	< 240	< 240	< 240 J	R	< 1300	< 12700	< 260 J	< 2240	< 2580	
p-Chloroaniline	8200 J	< 240	< 240	< 240 J	R	2300	< 12700	< 260 J	8540	31500	
p-Dimethylaminoazobenzene	< 2430 J	< 240	< 240	< 240 J	R	< 1600	< 12700	< 260 J	< 2240	< 2580	
p-Nitrotoluene	< 3640 J	< 360	< 360	< 370 J	R	< 1100	< 19100	< 390 J	< 3360	< 3880	
Metals (µg/kg)											
Antimony	< 485	< 475	NA	< 490	< 424	NA	< 509	< 526	< 443	23533	
Cadmium	1096	893	NA	990	2115	NA	1192	1163	891	12504	
Chromium	21403	20826	NA	23069	32776	NA	18089	18709	34791	70740	
Lead	18696	19000	NA	17727	58610	NA	14574	22686	266649	129312	
Nickel	29282	28694	NA	30640	15596338	NA	27922	100979	198775	144668	
Miscellaneous (µg/kg)											
Percent Moisture	17.6%	15.7%	NA	18.3%	5.73%	18.3%	21.4%	23.9%	10.8%	22.6%	
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BTU from ECD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Ignitability (Flash Point) for S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Percent Ash	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
pH in Water (Solid Sample)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, additional information

U=Nondetect at reported limit

<=Nondetect at reported limit

BLE 4.5-1
Analytical Results for
SWMU Group ID: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB11-0608	SM010-TB11-0608	SM010-TB11-1719	SM010-TB12-0001	SM010-TB12-0305	SM010-TB12-1010	SM010-TB13-0001	SM010-TB13-0305	SM010-TB13-1618	SM010-TB14-0001
SAMPLE DEPTH(ft)	6.00-8.00	6.00-8.00	17.00-19.00	0.00-1.00	3.00-5.00	10.00-10.00	0.00-1.00	3.00-5.00	16.00-18.00	0.00-1.00
SAMPLE LOCATION	TB11	TB11	TB11	TB12	TB12	TB12	TB13	TB13	TB13	TB14
SAMPLE DATE	6/30/1997	11/12/1999	6/30/1997	6/30/1997	6/30/1997	6/30/1997	7/8/1997	7/8/1997	7/8/1997	7/8/1997
PARAMETER										
Volatiles (µg/kg)										
1,1,1,2-Tetrachloroethane	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
1,1,1-Trichloroethane	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
1,1,2,2-Tetrachloroethane	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
1,1,2-Trichloroethane	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
1,1-Dichloroethane	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
1,1-Dichloroethene	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
1,1-Dichloropropene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
1,2,3-Trichlorobenzene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
1,2,3-Trichloropropane	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
1,2,4-Trichlorobenzene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
1,2,4-Trimethylbenzene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
1,2-Dibromo-3-chloropropane	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
1,2-Dibromoethane	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
1,2-Dichlorobenzene	3320	NA	70100 J	< 266	15300	97200	387 J	< 289	638 J	< 273
1,2-Dichloroethane	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
1,2-Dichloropropane	< 467	NA	< 476	< 404	< 448	< 19200	< 398	< 439	< 466	< 414
1,3,5-Trimethylbenzene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
1,3-Dichlorobenzene	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
1,3-Dichloropropane	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
1,4-Dichlorobenzene	835	NA	8010	< 266	2000	< 12800	< 262	< 289	< 307	< 273
2,2-Dichloropropane	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
2-Butanone (MEK)	< 1080	NA	< 1100	< 936	< 1040	< 44800	< 921	< 1020	< 1080	< 960
2-Chloroethyl Vinyl Ether	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
2-Chlorotoluene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
2-Hexanone	< 467	NA	< 476	< 404	< 448	< 19200	< 398	< 439	< 466	< 414
4-Chlorotoluene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
4-Methyl-2-pentanone (MIK)	< 467	NA	< 476	< 404	< 448	< 19200	< 398	< 439	< 466	< 414
Acetone	< 1080	NA	< 1100	< 936	< 1040	< 44800	< 921	< 1020	< 1080	< 960
Acrolein	< 3070	NA	< 3130	< 2660	< 2940	< 128000	< 2620	< 2890	< 3070	< 2730
Acrylonitrile	< 1600	NA	< 1630	< 1380	< 1530	< 63900	< 1360	< 1500	< 1600	< 1420
Allyl Chloride	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Benzene	774	NA	< 163 J	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Bromobenzene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Bromochloromethane	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Bromodichloromethane	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
Bromoform	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Bromomethane	< 467	NA	< 476	< 404	< 448	< 19200	< 398	< 439	< 466	< 414
Carbon Disulfide	< 467	NA	< 476	< 404	< 448	< 19200	< 398	< 439	< 466	< 414
Carbon Tetrachloride	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Chlorobenzene	34400	NA	613 J	340 J	4590	5880000	< 136	< 150	< 160	262 J
Chloroethane	< 467	NA	< 476	< 404	< 448	< 19200	< 398	< 439	< 466	< 414
Chloroform	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Chloromethane	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
Dibromochloromethane	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Dibromomethane	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Dichlorodifluoromethane	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
Ethyl Methacrylate	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Ethylbenzene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Freon 113	< 307	NA	638 J	702 JB	919 JB	< 12800	< 262	323 J	< 307	< 273
Freon 141b	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Hexachlorobutadiene	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
Isopropylbenzene	< 467	NA	< 476	< 404	< 448	< 19200	< 398	< 439	< 466	< 414
Methyl Iodide	< 467	NA	< 476	< 404	< 448	< 19200	< 398	< 439	< 466	< 414
Methylene Chloride	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB11-0608 6.00-8.00 TB11 6/30/1997	SM010-TB11-0608 6.00-8.00 TB11 11/12/1999	SM010-TB11-1719 17.00-19.00 TB11 6/30/1997	SM010-TB12-0001 0.00-1.00 TB12 6/30/1997	SM010-TB12-0305 3.00-5.00 TB12 6/30/1997	SM010-TB12-1010 10.00-10.00 TB12 6/30/1997	SM010-TB13-0001 0.00-1.00 TB13 7/8/1997	SM010-TB13-0305 3.00-5.00 TB13 7/8/1997	SM010-TB13-1618 16.00-18.00 TB13 7/8/1997	SM010-TB14-0001 0.00-1.00 TB14 7/8/1997
PARAMETER										
Naphthalene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Styrene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Tetrachloroethene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Toluene	< 160	NA	< 163 J	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Trichloroethene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
Trichlorofluoromethane	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
Vinyl Acetate	< 467	NA	< 476	< 404	< 448	< 19200	< 398	< 439	< 466	< 414
Vinyl Chloride	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
cis-1,2-Dichloroethene	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
cis-1,3-Dichloropropene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
m+p-Xylene	307 J	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
n-Butylbenzene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
n-Propylbenzene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
o-Xylene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
p-Isopropyltoluene	418 J	NA	363 J	< 138	< 153	11900 J	< 136	< 150	< 160	< 142
sec-Butylbenzene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
tert-Butylbenzene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
trans-1,2-Dichloroethene	< 307	NA	< 313	< 266	< 294	< 12800	< 262	< 289	< 307	< 273
trans-1,3-Dichloropropene	< 160	NA	< 163	< 138	< 153	< 6390	< 136	< 150	< 160	< 142
trans-1,4-Dichloro-2-butene	< 1600	NA	< 1630	< 1380	< 1530	< 63900	< 1360	< 1500	< 1600	< 1420
Semivolatiles (µg/kg)										
1,2,3-Trichlorobenzene	< 290 J	NA	< 300	< 510 J	< 280	< 3070 J	< 1260	< 2770	< 290	< 2620
1,2,4,5-Tetrachlorobenzene	< 290 J	NA	< 300	< 510 J	< 280	< 3070 J	< 1260	< 2770	< 290	< 2620
1,2,4-Trichlorobenzene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
1,2-Dichlorobenzene	2700 J	NA	< 250	< 430 J	21900	85900 J	< 1050	< 2310	< 250	< 2180
1,3-Dichlorobenzene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
1,4-Dichlorobenzene	2580 J	NA	1890	< 430 J	2520	< 2560 J	< 1050	< 2310	< 250	< 2180
1-Chloronaphthalene	< 610 J	NA	< 630	< 1060 J	< 590	< 6390 J	< 2620	< 5770	< 610	< 5450
1-Methylnaphthalene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
1-Naphthylamine	< 840 J	NA	< 850	< 1450 J	< 800	< 8700 J	< 3560	< 7850	< 830	< 7420
2,3,4,6-Tetrachlorophenol	< 490 J	NA	< 500	R	< 470	< 5120	< 2090	< 4620	< 490 J	< 4360
2,3-Dichloroaniline	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
2,4,5-Trichlorophenol	< 250 J	NA	< 250	R	< 240	< 2560	< 1050	< 2310	< 250 J	< 2180
2,4,6-Trichlorophenol	< 250 J	NA	< 250	R	< 240	< 2560	< 1050	< 2310	< 250 J	< 2180
2,4-Dichlorophenol	< 250 J	NA	< 250	R	< 240	< 2560	< 1050	< 2310	< 250 J	< 2180
2,4-Dimethylphenol	< 250 J	NA	< 250	R	< 240	< 2560	< 1050	< 2310	< 250 J	< 2180
2,4-Dinitrophenol	< 1520 J	NA	< 1550	R	< 1460	< 15900	< 6490	< 14300	< 1520 J	< 13500
2,4-Dinitrotoluene	300 J	NA	< 250	< 430 J	580	< 2560 J	< 1050	< 2310	< 250	< 2180
2,4-Toluenediamine	< 1230 J	NA	< 1250	R	< 1180	< 12800 J	< 5230	< 11600	< 1230	< 10900
2,6-Dichlorophenol	< 250 J	NA	< 250	R	< 240	< 2560	< 1050	< 2310	< 250 J	< 2180
2,6-Dinitrotoluene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
2-Chloronaphthalene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
2-Chlorophenol	< 250 J	NA	< 250	R	< 240	< 2560	< 1050	< 2310	< 250 J	< 2180
2-Methylnaphthalene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
2-Naphthylamine	< 930 J	NA	< 950	< 1620 J	< 900	< 9720 J	< 3980	< 8780	< 930	< 8290
2-Nitroaniline	< 290 J	NA	< 300	< 510 J	< 280	3200 J	< 1260	< 2770	< 290	< 2620
2-Nitrodiphenylamine	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
2-Nitrophenol	< 250 J	NA	< 250	R	< 240	< 2560	< 1050	< 2310	< 250 J	< 2180
2-Picoline	< 910 J	NA	< 930	< 1570 J	< 870	< 9460 J	< 3870	< 8540	< 910	< 8070
3,3'-Dichlorobenzidine	< 1500 J	NA	< 1530	< 2590 J	< 1440	< 15600 J	< 6380	< 14100	< 1500	< 1300
3-Methylcholanthrene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
3-Nitroaniline	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
4,4' Methyleneedianiline	37600 J	NA	< 2200	< 3740 J	29900	550000 J	< 9210	< 20300	< 2160	< 19200
4,6-Dinitro-o-cresol	< 250 J	NA	< 250	R	< 240	< 2560	< 1050	< 2310	< 250 J	< 2180

TABLE 4.5-1
Statistical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB11-0608	SM010-TB11-0608	SM010-TB11-1719	SM010-TB12-0001	SM010-TB12-0303	SM010-TB12-1010	SM010-TB13-0001	SM010-TB13-0305	SM010-TB13-1618	SM010-TB14-0001
SAMPLE DEPTH(0)	6.00-8.00	6.00-8.00	17.00-19.00	0.00-1.00	3.00-5.00	10.00-10.00	0.00-1.00	3.00-5.00	16.00-18.00	0.00-1.00
SAMPLE LOCATION	TB11	TB11	TB11	TB12	TB12	TB12	TB13	TB13	TB13	TB14
SAMPLE DATE	6/30/1997	11/12/1999	6/30/1997	6/30/1997	6/30/1997	6/30/1997	7/8/1997	7/8/1997	7/8/1997	7/8/1997
PARAMETER										
4-Aminobiphenyl	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
4-Aminodiphenylamine	< 610 J	NA	< 630	< 1060 J	< 590	< 6390 J	< 2620	< 5770	< 610	< 5450
4-Bromophenyl phenyl ether	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
4-Chloro-m-cresol	< 250 J	NA	< 250	R	300	< 2560	< 1050	< 2310	< 250 J	< 2180
4-Chlorophenylphenyl ether	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
4-Nitroaniline	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
4-Nitrophenol	< 250 J	NA	< 250 J	R	< 240 J	< 2560 J	< 1050 J	< 2310 J	< 250 J	< 2180 J
5-Nitro-o-toluidine	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
7,12-dimethylbenz[a]anthracene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Acenaphthene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Acenaphthylene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Acetophenone	< 320 J	NA	< 330	< 550 J	< 310	< 3320 J	< 1360	< 3000	< 320	< 2840
Aniline	6490 J	NA	< 350	< 600 J	< 330	315000 J	< 1470	< 3230	< 340	< 3050
Anthracene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Azobenzene	< 290 J	NA	< 300	< 510 J	< 280	< 3070 J	< 1260	< 2770	< 290	< 2620
Benzidine	< 3930 J	NA	< 4000	< 6800 J	< 3770	< 40900 J	< 16700	< 37000	< 3930	< 34900
Benz(a)anthracene	< 320 J	NA	< 330	< 550 J	< 310	< 3320 J	< 1360	< 3000	< 320	< 2840
Benz(a)pyrene	< 250 J	NA	< 250	< 430 J	270	< 2560 J	< 1050	< 2310	< 250	< 2180
Benz(b)fluoranthene	< 250 J	NA	< 250	< 430 J	250	< 2560 J	< 1050	< 2310	< 250	< 2180
Benz(g,h)perylene	< 270 J	NA	< 280	< 470 J	< 260	< 2810 J	< 1150	< 2540	< 270	< 2400
Benz(k)fluoranthene	320 J	NA	< 250	< 430 J	330	< 2560 J	< 1050	< 2310	< 250	< 2180
Benzoic Acid	< 250 J	NA	< 250	R	< 240	< 2560	< 1050	< 2310	< 250 J	< 2180
Benzyl Alcohol	< 250 J	NA	< 250	R	< 240	< 2560	< 1050	< 2310	< 250 J	< 2180
Benzyl butyl phthalate	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Bis(2-chloroethoxymethane)	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Bis(2-chloroethyl)ether	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Bis(2-chloroisopropyl)ether	< 250 J	NA	< 250 J	< 430 J	< 240 J	< 2560 J	< 1050 J	< 2310 J	< 250 J	< 2180 J
Bis(2-ethylhexyl) phthalate	460 JB	NA	470	< 510 J	420	< 3070 J	< 1260	< 2770	390 B	< 2620
Bisphenol A	56300 J	NA	< 450	< 770 J	1550	< 4600 J	2440	< 4160	< 440	< 3930
Carbazole	< 1230 J	NA	< 1250	< 2130 J	< 1180	< 12800 J	< 5230	< 11600	< 1230	< 10900
Chrysene	< 250 J	NA	< 250	< 430 J	280	< 2560 J	< 1050	< 2310	< 250	< 2180
Cyclohexanone	1190 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Di-n-butyl phthalate	1830 JB	NA	420 J	430 JB	< 240 J	< 2560 J	< 1050 J	< 2310 J	620 JB	< 2180 J
Di-n-octyl phthalate	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Dibenzo(a,h)anthracene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Dibenzofuran	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Diethyl Phthalate	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Dimethylphthalate	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Ethyl Methane Sulfonate	< 440 J	NA	< 450	< 770 J	< 420	< 4600 J	< 1880	< 4160	< 440	< 3930
Fluoranthene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Fluorene	< 250 J	NA	< 250 J	< 430 J	< 240 J	< 2560 J	< 1050 J	< 2310 J	< 250 J	< 2180 J
Heptachlor	< 270 J	NA	< 280	< 470 J	< 260	< 2810 J	< 1150	< 2540	< 270	< 2400
Hexachlorobenzene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Hexachlorobutadiene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Hexachlorocyclopentadiene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Hexachloroethane	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Indeno(1,2,3-cd)pyrene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Isophorone	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Methyl methane sulfonate	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
N-Nitrosodibutylamine	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
N-Nitrosodimethylamine	< 250 J	NA	< 250 J	< 430 J	< 240 J	< 2560 J	< 1050 J	< 2310 J	< 250 J	< 2180 J
N-Nitrosodiphenylamine	< 320 J	NA	< 330	< 550 J	< 310	< 3320 J	< 1360	< 3000	< 320	< 2840
N-Nitrosodipropylamine	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
N-Nitrosopiperidine	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Naphthalene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Nitrobenzene	< 250 J	NA	< 250	< 430 J	< 240	57500 J	< 1050	< 2310	< 250	< 2180
Pentachlorobenzene	< 420 J	NA	< 430	< 720 J	< 400	< 4350 J	< 1780	< 3930	< 420	< 3710

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB11-0608 6.00-8.00 TB11 6/30/1997	SM010-TB11-0608 6.00-8.00 TB11 11/12/1999	SM010-TB11-1719 17.00-19.00 TB11 6/30/1997	SM010-TB12-0001 0.00-1.00 TB12 6/30/1997	SM010-TB12-0305 3.00-5.00 TB12 6/30/1997	SM010-TB12-1010 10.00-10.00 TB12 6/30/1997	SM010-TB13-0001 0.00-1.00 TB13 7/8/1997	SM010-TB13-0305 3.00-5.00 TB13 7/8/1997	SM010-TB13-1618 16.00-18.00 TB13 7/8/1997	SM010-TB14-0001 0.00-1.00 TB14 7/8/1997
Pentachloronitrobenzene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Pentachlorophenol	< 250 J	NA	< 250	R	< 240	< 2560	< 1050	< 2310	< 250 J	< 2180
Phenacetin	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Phenanthrene	320 J	NA	< 250	< 430 J	410	< 2560 J	< 1050	< 2310	< 250	< 2180
Phenol	< 150 J	NA	160	R	450	15500	710	< 1390	< 150 J	28100
Pyrene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Pyridine	< 270 J	NA	< 280	< 470 J	< 260	< 2810 J	< 1150	< 2540	< 270	< 2400
Trimethylphosphate	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
Triphenylphosphate	< 1230 J	NA	< 1250	< 2130 J	< 1180	< 12800 J	< 5230	< 11600	< 1230	< 10900
m,p-Cresol	< 370 J	NA	< 380	R	< 350	< 3840	< 1570	< 3460	< 370 J	< 3270
m-Nitrotoluene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
m-Toluidine	< 490 J	NA	< 500	< 850 J	< 470	< 5120 J	< 2090	< 4620	< 490	< 4360
o,p-Toluidine	< 1250 J	NA	< 1280	< 2170 J	< 1200	< 13000 J	< 5340	< 11800	< 1250	< 11100
o-Cresol	< 250 J	NA	< 250	R	< 240	< 2560	< 1050	< 2310	< 250 J	< 2180
o-Nitrotoluene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
p-Chloroaniline	14900 J	NA	< 250	< 430 J	410	2920 J	< 1050	< 2310	< 250	< 2180
p-Dimethylaminoazobenzene	< 250 J	NA	< 250	< 430 J	< 240	< 2560 J	< 1050	< 2310	< 250	< 2180
p-Nitrotoluene	< 370 J	NA	< 380	< 640 J	< 350	< 3840 J	< 1570	< 3460	< 370	< 3270
Metals (µg/kg)										
Antimony	< 474	< 2,490	< 480	< 425	< 471	< 487	< 419	< 462	< 491	< 436
Cadmium	534	1730	588	776	756	639	672	710	927	761
Chromium	27990	12600	7254	17164	16690	315827	14820	16681	18036	24069
Lead	16192	19500	7451	12692	14503	11784	15276	15231	14265	16622
Nickel	33327	880000	11698	19177	17841	37514	89808	25606	21745	38454
Miscellaneous (µg/kg)										
Percent Moisture	18.6%			20.1%	5.95%	15.1%	21.8%	4.44%	13.4%	18.5%
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.32%
BTU from ECD	NA	NA	NA	NA	NA	NA	NA	NA	NA	5000000
Ignitability (Flash Point) for S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Percent Ash	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH in Water (Solid Sample)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, additional information

U=Nondetect at reported limit

<=Nondetect at reported limit

TABLE 4.5-1
Chemical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB14-0305	SM010-TB14-1618	SM010-TB14-1618FD	SM010-TB15-0001	SM010-TB15-0305	SM010-TB15-0708	SM010-TB15-1517	SM010-TB16-0001	SM010-TB16-0305	SM010-TB16-1820
SAMPLE DEPTH(ft)	3.00-5.00	16.00-18.00	16.00-18.00	0.00-1.00	3.00-5.00	7.00-8.00	15.00-17.00	0.00-1.00	3.00-5.00	18.00-20.00
SAMPLE LOCATION	TB14	TB14	TB14	TB15	TB15	TB15	TB15	TB16	TB16	TB16
SAMPLE DATE	7/8/1997	7/8/1997	7/8/1997	7/8/1997	7/8/1997	7/8/1997	7/8/1997	7/9/1997	7/9/1997	7/9/1997
PARAMETER										
Volatiles (µg/kg)										
1,1,1,2-Tetrachloroethane	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
1,1,1-Trichloroethane	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
1,1,2,2-Tetrachloroethane	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
1,1,2-Trichloroethane	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
1,1-Dichloroethane	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
1,1-Dichloroethene	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
1,1-Dichloropropene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
1,2,3-Trichlorobenzene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
1,2,3-Trichloropropane	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
1,2,4-Trichlorobenzene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
1,2,4-Trimethylbenzene	< 150	< 150	< 150	< 141	< 155	< 150	394 J	< 146	< 150	< 153
1,2-Dibromo-3-chloropropane	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
1,2-Dibromoethane	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
1,2-Dichlorobenzene	< 288	< 289	< 289	1190	1040	1270	64400	< 281	1270	74200
1,2-Dichloroethane	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
1,2-Dichloropropane	< 438	< 440	< 440	< 412	< 452	< 437	< 453	< 426	< 439	< 448
1,3,5-Trimethylbenzene	< 150	< 150	< 150	< 141	< 155	< 150	215 J	< 146	< 150	< 153
1,3-Dichlorobenzene	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
1,3-Dichloropropane	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
1,4-Dichlorobenzene	< 288	< 289	< 289	< 271	< 298	< 288	1100	< 281	< 289	1530
2,2-Dichloropropane	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
2-Butanone (MEK)	< 1010	< 1020	< 1020	< 954	< 1050	< 1010	< 1050	< 988	< 1020	< 1040
2-Chloroethyl Vinyl Ether	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
2-Chlorotoluene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
2-Hexanone	< 438	< 440	< 440	< 412	< 452	< 437	< 453	< 426	< 439	< 448
4-Chlorotoluene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
4-Methyl-2-pentanone (MIK)	< 438	< 440	< 440	< 412	< 452	< 437	< 453	< 426	< 439	< 448
Acetone	< 1010	< 1020	< 1020	< 954	< 1050	< 1010	< 1050	< 988	< 1020	< 1040
Acrolein	< 2880	< 2890	< 2890	< 2710	< 2980	< 2880	< 2980	< 2810	< 2890	< 2940
Acrylonitrile	< 1500	< 1500	< 1500	< 1410	< 1550	< 1500	< 1550	< 1460	< 1500	< 1530
Allyl Chloride	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
Benzene	< 150	< 150	< 150	< 141	< 155	< 150	286 J	< 146	404 J	5420
Bromobenzene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
Bromochloromethane	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
Bromodichloromethane	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
Bromoform	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
Bromomethane	< 438	< 440	< 440	< 412	< 452	< 437	< 453	< 426	< 439	< 448
Carbon Disulfide	< 438	< 440	< 440	< 412	< 452	< 437	< 453	< 426	< 439	< 448
Carbon Tetrachloride	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
Chlorobenzene	< 150	< 150	< 150	< 141	< 155	< 150	1170	< 146	< 150	1180
Chloroethane	< 438	< 440	< 440	< 412	< 452	< 437	< 453	< 426	< 439	< 448
Chloroform	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
Chloromethane	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
Dibromochloromethane	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
Dibromomethane	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
Dichlorodifluoromethane	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
Ethyl Methacrylate	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
Ethylbenzene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
Freon 113	669 J	< 289	< 289	< 271	< 298	< 288	< 298	539 J	< 289	< 294
Freon 141b	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
Hexachlorobutadiene	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
Isopropylbenzene	< 438	< 440	< 440	< 412	< 452	< 437	< 453	< 426	< 439	< 448
Methyl Iodide	< 438	< 440	< 440	< 412	< 452	< 437	< 453	< 426	< 439	< 448
Methylene Chloride	< 288	< 289	< 289	< 289	< 271	< 298	< 288	< 281	< 289	< 294

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB14-0305 3.00-5.00 TB14 7/8/1997	SM010-TB14-1618 16.00-18.00 TB14 7/8/1997	SM010-TB14-1618FD 16.00-18.00 TB14 7/8/1997	SM010-TB15-0001 0.00-1.00 TB15 7/8/1997	SM010-TB15-0305 3.00-5.00 TB15 7/8/1997	SM010-TB15-0708 7.00-8.00 TB15 7/8/1997	SM010-TB15-1517 15.00-17.00 TB15 7/8/1997	SM010-TB16-0001 0.00-1.00 TB16 7/9/1997	SM010-TB16-0305 3.00-5.00 TB16 7/9/1997	SM010-TB16-1820 18.00-20.00 TB16 7/9/1997
Naphthalene	< 150	< 150	< 150	< 141	< 155	< 150	203 J	< 146	< 150	< 153
Styrene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
Tetrachloroethene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
Toluene	< 150	4980	6940	< 141	< 155	< 150	1070	< 146	< 150	1140
Trichloroethene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
Trichlorofluoromethane	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
Vinyl Acetate	< 438	< 440	< 440	< 412	< 452	< 437	< 453	< 426	< 439	< 448
Vinyl Chloride	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
cis-1,2-Dichloroethene	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
cis-1,3-Dichloropropene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
m+p-Xylene	< 150	< 150	< 150	< 141	< 155	< 150	740 J	< 146	< 150	< 153
n-Butylbenzene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
n-Propylbenzene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
o-Xylene	< 150	< 150	< 150	< 141	< 155	< 150	430 J	< 146	< 150	< 153
n-Isopropyltoluene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	200 J
sec-Butylbenzene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
tert-Butylbenzene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
trans-1,2-Dichloroethene	< 288	< 289	< 289	< 271	< 298	< 288	< 298	< 281	< 289	< 294
trans-1,3-Dichloropropene	< 150	< 150	< 150	< 141	< 155	< 150	< 155	< 146	< 150	< 153
trans-1,4-Dichloro-2-butene	< 1500	< 1500	< 1500	< 1410	< 1550	< 1500	< 1550	< 1460	< 1500	< 1530
Semivolatiles (µg/kg)										
1,2,3-Trichlorobenzene	< 280	< 280	< 280	< 2600	< 290	< 280	< 290	< 270	< 280	< 2830
1,2,4,5-Tetrachlorobenzene	< 280	< 280	< 280	< 2600	< 290	< 280	< 290	< 270	< 280	< 2830
1,2,4-Trichlorobenzene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
1,2-Dichlorobenzene	< 230	590	590	2930	700	11900	15200	< 220	1920	13300
1,3-Dichlorobenzene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
1,4-Dichlorobenzene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
1-Chloronaphthalene	< 580	< 580	< 580	< 5420	< 600	< 580	< 600	< 560	< 580	< 5890
1-Methylnaphthalene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	370	< 230	< 2360
1-Naphthylamine	< 780	< 790	< 790	< 7370	< 810	< 780	< 810	< 760	< 790	< 8010
2,3,4,6-Tetrachlorophenol	< 460	< 460	< 460	< 4340	< 480	< 460	< 480	< 450	< 460	< 4710
2,3-Dichloroaniline	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
2,4,5-Trichlorophenol	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
2,4,6-Trichlorophenol	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
2,4-Dichlorophenol	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
2,4-Dimethylphenol	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
2,4-Dinitrophenol	< 1430	< 1440	< 1440	< 13500	< 1480	< 1430	< 1480	< 1390	< 1430	< 14600
2,4-Dinitrotoluene	8950	410	410	< 2170	< 240	3570	16700	320	< 230	183000
2,4-Toluenediamine	< 1150	< 1160	< 1160	< 10800	< 1190	< 1150	< 1190	< 1120	< 1150	< 11800
2,6-Dichlorophenol	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
2,6-Dinitrotoluene	< 230	530	530	< 2170	< 240	1030	2740	< 220	< 230	43600
2-Chloronaphthalene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
2-Chlorophenol	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
2-Methylnaphthalene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	480	< 230	< 2360
2-Naphthylamine	< 880	< 880	< 880	< 8240	< 900	< 870	< 910	< 850	< 880	< 8950
2-Nitroaniline	< 280	< 280	< 280	< 2600	< 290	< 280	< 290	< 270	< 280	< 2830
2-Nitrodiphenylamine	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
2-Nitrophenol	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
2-Picoline	< 850	< 860	< 860	< 8020	< 880	< 850	< 880	< 830	< 850	< 8720
3,3'-Dichlorobenzidine	< 1410	< 1410	< 1410	< 13200	< 1450	< 1400	< 1460	< 1370	< 1410	< 14400
3-Methylcholanthrene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
3-Nitroaniline	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
4,4'-Methylenedianiline	< 2030	< 2040	< 2040	< 19100	< 2100	< 2030	< 2100	< 1980	< 2030	< 20700
4,6-Dinitro-o-cresol	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360

LE 4.5-1
S...
ical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB14-0305	SM010-TB14-1618	SM010-TB14-1618FD	SM010-TB15-0001	SM010-TB15-0305	SM010-TB15-0708	SM010-TB15-1517	SM010-TB16-0001	SM010-TB16-0305	SM010-TB16-1820
SAMPLE LOCATION	3.00-5.00 TB14 7/8/1997	16.00-18.00 TB14 7/8/1997	16.00-18.00 TB14 7/8/1997	0.00-1.00 TB15 7/8/1997	3.00-5.00 TB15 7/8/1997	7.00-8.00 TB15 7/8/1997	15.00-17.00 TB15 7/8/1997	0.00-1.00 TB16 7/9/1997	3.00-5.00 TB16 7/9/1997	18.00-20.00 TB16 7/9/1997
SAMPLE DATE										
PARAMETER										
4-Aminobiphenyl	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
4-Aminodiphenylamine	< 580	< 580	< 580	< 5420	< 600	< 580	< 600	< 560	< 580	< 5890
4-Bromophenyl phenyl ether	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
4-Chloro-m-cresol	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
4-Chlorophenylphenyl ether	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
4-Nitroaniline	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
4-Nitrophenol	< 230 J	< 230 J	< 230 J	< 2170 J	< 240 J	< 230 J	< 240 J	< 220 J	< 230 J	< 2360 J
5-Nitro-o-toluidine	350	< 230	< 230	< 2170	< 240	< 230	390	< 220	360	< 2360
7,12-dimethylbenz[a]anthracene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Acenaphthene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Acenaphthylene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Acetophenone	< 300	< 300	< 300	< 2820	< 310	< 300	< 310	< 290	< 300	< 3060
Aniline	< 320	< 320	< 320	< 3040	< 330	< 320	< 330	< 310	1280	< 3300
Anthracene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Azobenzene	< 280	< 280	< 280	< 2600	< 290	< 280	< 290	< 270	< 280	< 2830
Benzidine	< 3690	< 3700	< 3700	< 34700	< 3810	< 3680	< 3820	< 3590	< 3700	< 37700
Benzo(a)anthracene	< 300	< 300	< 300	< 2820	< 310	< 300	< 310	< 290	< 300	< 3060
Benzo(a)pyrene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Benzo(b)fluoranthene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Benzo(ghi)perylene	< 250	< 250	< 250	< 2390	< 260	< 250	< 260	< 250	< 250	< 2590
Benzo(k)fluoranthene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Benzoic Acid	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Benzyl Alcohol	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Benzyl butyl phthalate	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Bis(2-chloroethoxyethane)	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Bis(2-chloroethyl)ether	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	1650	< 2360
Bis(2-chloroisopropyl)ether	< 230 J	< 230 J	< 230 J	< 2170 J	< 240 J	< 230 J	< 240 J	< 220 J	< 230 J	< 2360 J
Bis(2-ethylhexyl) phthalate	330 B	310 B	310 B	< 2600	780 B	350 B	300 B	900 B	380 B	< 2830
Bisphenol A	< 420	< 420	< 420	< 3900	740	< 410	< 430	< 400	< 420	< 4240
Carbazole	< 1150	< 1160	< 1160	< 10800	< 1190	< 1150	< 1190	< 1120	< 1150	< 11800
Chrysene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Cyclohexanone	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Di-n-butyl phthalate	520 JB	1090 JB	1090 JB	< 2170 J	1100 JB	1110 JB	570 JB	7950 JB	12800 JB	9000 JB
Di-n-octyl phthalate	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Dibenzo(a,h)anthracene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Dibenzofuran	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Diethyl Phthalate	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	240	400	< 2360
Dimethylphthalate	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Ethyl Methane Sulfonate	< 420	< 420	< 420	< 3900	< 430	< 410	< 430	< 400	< 420	< 4240
Fluoranthene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Fluorene	< 230 J	< 230 J	< 230 J	< 2170 J	< 240 J	< 230 J	< 240 J	< 220 J	< 230 J	< 2360 J
Heptachlor	< 250	< 250	< 250	< 2390	< 260	< 250	< 260	< 250	< 250	< 2590
Hexachlorobenzene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Hexachlorobutadiene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Hexachlorocyclopentadiene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Hexachloroethane	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Indeno(1,2,3-cd)pyrene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Isophorone	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Methyl methane sulfonate	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
N-Nitrosodibutylamine	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
N-Nitrosodimethylamine	< 230 J	< 230 J	< 230 J	< 2170 J	< 240 J	< 230 J	< 240 J	< 220 J	< 230 J	< 2360 J
N-Nitrosodiphenylamine	< 300	< 300	< 300	< 2820	< 310	< 300	< 310	< 290	< 300	< 3060
N-Nitrosodipropylamine	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
N-Nitrosopiperidine	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Naphthalene	< 230	< 230	< 230	< 2170	< 240	< 230	< 240	< 220	< 230	< 2360
Nitrobenzene	< 230	8520	8520	< 2170	< 240	< 230	3390	< 220	590	133000
Pentachlorobenzene	< 390	< 390	< 390	< 3690	< 400	< 390	< 410	< 380	< 390	< 4000

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

Notes:-

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, addit.

U=Nondetect at reported limit

ILE 4.5-1
tical Results for
SWMU Group D: SWMUS 10, 12, 15 and 16

PARAMETER	SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB17-0001 0.00-1.00 TB17 7/9/1997	SM010-TB17-0305 3.00-5.00 TB17 7/9/1997	SM010-TB17-1012 10.00-12.00 TB17 7/9/1997	SM010-TB17-1719 17.00-19.00 TB17 7/9/1997	SM010-TB18-0001 0.00-1.00 TB18 7/9/1997	SM010-TB18-0305 3.00-5.00 TB18 7/9/1997	SM010-TB18-0810 8.00-10.00 TB18 7/9/1997	SM010-TB18-1517 15.00-17.00 TB18 7/9/1997	SM010-TB18-1517FD 15.00-17.00 TB18 7/9/1997	SM010-TB19-0001 0.00-1.00 TB19 7/1/1997
Volatiles (µg/kg)											
1,1,1,2-Tetrachloroethane	<271	<289	<303	<294	<270	<293	<297	<313	<313	<276	
1,1,1-Trichloroethane	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
1,1,2,2-Tetrachloroethane	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
1,1,2-Trichloroethane	<271	<289	<303	<294	<270	<293	<297	<313	<313	<276	
1,1-Dichloroethane	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
1,1-Dichloroethene	<271	<289	<303	<294	<270	<293	<297	<313	<313	<276	
1,1-Dichloropropene	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
1,2,3-Trichlorobenzene	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
1,2,3-Trichloropropane	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
1,2,4-Trichlorobenzene	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
1,2,4-Trimethylbenzene	<141	<150	<158	<153	2050	<152	<154	<163	<163	<143	
1,2-Dibromo-3-chloropropane	<271	<289	<303	<294	<270	<293	<297	<313	<313	<276	
1,2-Dibromoethane	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
1,2-Dichlorobenzene	<271	<289	<303	<294	<270	<293	<297	<313	<313	<276	
1,2-Dichloroethane	<271	<289	<303	<294	<270	<293	<297	<313	<313	<276	
1,2-Dichloropropane	<412	<439	<461	<447	<410	<445	<451	<476	<476	<419	
1,3,5-Trimethylbenzene	<141	<150	<158	<153	410 J	<152	<154	<163	<163	<143	
1,3-Dichlorobenzene	<271	<289	<303	<294	<270	<293	<297	<313	<313	<276	
1,3-Dichloropropane	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
1,4-Dichlorobenzene	<271	<289	<303	<294	<270	<293	<297	<313	<313	<276	
2,2-Dichloropropane	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
2-Butanone (MEK)	<955	<1020	<1070	<1030	<950	<1030	<1040	<1100	<1100	<970	
2-Chloroethyl Vinyl Ether	<271	<289	<303	<294	<270	<293	<297	<313	<313	<276	
2-Chlorotoluene	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
2-Hexanone	<412	<439	<461	<447	<410	<445	<451	<476	<476	<419	
4-Chlorotoluene	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
4-Methyl-2-pentanone (MIK)	<412	<439	<461	<447	<410	<445	<451	<476	<476	<419	
Acetone	<955	<1020	<1070	<1030	<950	<1030	<1040	<1100	<1100	<970	
Acrolein	<2710	<2890	<3030	<2940	<2700	<2930	<2970	<3130	<3130	<2760	
Acrylonitrile	<1410	<1500	<1580	<1530	<1400	<1520	<1540	<1630	<1630	<1430	
Allyl Chloride	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
Benzene	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
Bromobenzene	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
Bromoform	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
Bromochloromethane	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
Bromodichloromethane	<271	<289	<303	<294	<270	<293	<297	<313	<313	<276	
Bromoform	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
Bromomethane	<412	<439	<461	<447	<410	<445	<451	<476	<476	<419	
Carbon Disulfide	<412	<439	<461	<447	<410	<445	<451	<476	<476	<419	
Carbon Tetrachloride	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
Chlorobenzene	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
Chloroethane	<412	<439	<461	<447	<410	<445	<451	<476	<476	<419	
Chloroform	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
Chloromethane	<271	<289	<303	<294	<270	<293	<297	<313	<313	<276	
Dibromochloromethane	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
Dibromomethane	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
Dichlorodifluoromethane	<271	<289	<303	<294	<270	<293	<297	<313	<313	<276	
Ethyl Methacrylate	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
Ethylbenzene	<141	<150	<158	<153	151 J	<152	<154	<163	<163	<143	
Freon 113	<271	497 J	<303	<294	669 J	703 J	475 J	501 J	1380 J	<276	
Freon 141b	<141	<150	<158	<153	<140	<152	<154	<163	<163	<143	
Hexachlorobutadiene	<271	<289	<303	<294	<270	<293	<297	<313	<313	<276	
Isopropylbenzene	<412	<439	<461	<447	<410	<445	<451	<476	<476	<419	
Methyl Iodide	<412	<439	<461	<447	<410	<445	<451	<476	<476	<419	
Methylene Chloride	<271	<289	<303	<294	<270	<293	<297	<313	<313	<276	

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB17-0001	SM010-TB17-0305	SM010-TB17-1012	SM010-TB17-1719	SM010-TB18-0001	SM010-TB18-0305	SM010-TB18-0810	SM010-TB18-1517	SM010-TB18-1517FD	SM010-TB19-0001
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	10.00-12.00	17.00-19.00	0.00-1.00	3.00-5.00	8.00-10.00	15.00-17.00	15.00-17.00	0.00-1.00
SAMPLE LOCATION	TB17	TB17	TB17	TB17	TB18	TB18	TB18	TB18	TB18	TB19
SAMPLE DATE	7/9/1997	7/9/1997	7/9/1997	7/9/1997	7/9/1997	7/9/1997	7/9/1997	7/9/1997	7/9/1997	7/1/1997
PARAMETER										
Naphthalene	< 141	< 150	< 158	< 153	432 J	< 152	< 154	< 163	< 163	< 143
Styrene	< 141	< 150	< 158	< 153	< 140	< 152	< 154	< 163	< 163	< 143
Tetrachloroethene	< 141	< 150	< 158	< 153	< 140	< 152	< 154	< 163	< 163	< 143
Toluene	< 141	< 150	< 158	< 153	162 J	< 152	< 154	< 163	< 163	< 143
Trichloroethene	< 141	< 150	< 158	< 153	< 140	< 152	< 154	< 163	< 163	< 143
Trichlorofluoromethane	< 271	< 289	< 303	< 294	< 270	< 293	< 297	< 313	< 313	937
Vinyl Acetate	< 412	< 439	< 461	< 447	< 410	< 445	< 451	< 476	< 476	< 419
Vinyl Chloride	< 271	< 289	< 303	< 294	< 270	< 293	< 297	< 313	< 313	< 276
cis-1,2-Dichloroethene	< 271	< 289	< 303	< 294	< 270	< 293	< 297	< 313	< 313	< 276
cis-1,3-Dichloropropene	< 141	< 150	< 158	< 153	< 140	< 152	< 154	< 163	< 163	< 143
m+p-Xylene	< 141	< 150	< 158	< 153	356 J	< 152	< 154	< 163	< 163	< 143
n-Butylbenzene	< 141	< 150	< 158	< 153	< 140	< 152	< 154	< 163	< 163	< 143
n-Propylbenzene	< 141	< 150	< 158	< 153	< 140	< 152	< 154	< 163	< 163	< 143
o-Xylene	< 141	< 150	< 158	< 153	237 J	< 152	< 154	< 163	< 163	< 143
p-Isopropyltoluene	< 141	< 150	< 158	< 153	291 J	< 152	< 154	< 163	< 163	< 143
sec-Butylbenzene	< 141	< 150	< 158	< 153	259 J	< 152	< 154	< 163	< 163	< 143
tert-Butylbenzene	< 141	< 150	< 158	< 153	< 140	< 152	< 154	< 163	< 163	< 143
trans-1,2-Dichloroethene	< 271	< 289	< 303	< 294	< 270	< 293	< 297	< 313	< 313	< 276
trans-1,3-Dichloropropene	< 141	< 150	< 158	< 153	< 140	< 152	< 154	< 163	< 163	< 143
trans-1,4-Dichloro-2-butene	< 1410	< 1500	< 1580	< 1530	< 1400	< 1520	< 1540	< 1630	< 1630	< 1430
Semivolatile (µg/kg)										
1,2,3-Trichlorobenzene	< 2600	< 280	< 290	< 280	< 13000	< 280	< 280	< 300	< 300	< 530 J
1,2,4,5-Tetrachlorobenzene	< 2600	< 280	< 290	< 280	< 13000	< 280	< 280	< 300	< 300	< 530 J
1,2,4-Trichlorobenzene	< 270	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
1,2-Dichlorobenzene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
1,3-Dichlorobenzene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
1,4-Dichlorobenzene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
1-Chloronaphthalene	< 5430	< 580	< 610	< 590	< 27000	< 590	< 590	< 630	< 630	< 1100 J
1-Methylnaphthalene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
1-Naphthylamine	< 7380	< 790	< 820	< 800	< 36700	< 800	< 810	< 850	< 850	< 1500 J
2,3,4,6-Tetrachlorophenol	< 4340	< 460	< 480	< 470	< 21600	< 470	< 470	< 500	< 500	< 880 J
2,3-Dichloroaniline	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
2,4,5-Trichlorophenol	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
2,4,6-Trichlorophenol	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
2,4-Dichlorophenol	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
2,4-Dimethylphenol	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
2,4-Dinitrophenol	< 13500	< 1430	< 1500	< 1460	< 66900	< 1450	< 1470	< 1550	< 1550	< 2730 J
2,4-Dinitrotoluene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
2,4-Toluenediamine	< 10900	< 1160	< 1210	< 1180	< 54000	< 1170	< 1190	< 1250	< 1250	< 2200 J
2,6-Dichlorophenol	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
2,6-Dinitrotoluene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
2-Chloronaphthalene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
2-Chlorophenol	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
2-Methylnaphthalene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
2-Naphthylamine	< 8250	< 880	< 920	< 890	< 41000	< 890	< 900	< 950	< 950	< 1680 J
2-Nitroaniline	< 2600	< 280	< 290	< 280	< 13000	< 280	< 280	< 300	< 300	< 530 J
2-Nitrodiphenylamine	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
2-Nitrophenol	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
2-Picoline	< 8030	< 860	< 900	< 870	< 39900	< 870	< 880	< 930	< 930	< 1630 J
3,3'-Dichlorobenzidine	< 13200	< 1410	< 1480	< 1430	< 65800	< 1430	< 1450	< 1530	< 1530	< 2690 J
3-Methylcholanthrene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
3-Nitroaniline	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
4,4' Methyleneedianiline	< 19100	< 2030	< 2130	< 2070	< 95000	< 2060	< 2090	< 2200	< 2200	< 3880 J
4,6-Dinitro-o-cresol	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J

TABLE 4.5-1
Statistical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB17-0001	SM010-TB17-0305	SM010-TB17-1012	SM010-TB17-1719	SM010-TB18-0001	SM010-TB18-0305	SM010-TB18-0810	SM010-TB18-1517	SM010-TB18-1517FD	SM010-TB19-0001
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	10.00-12.00	17.00-19.00	0.00-1.00	3.00-5.00	8.00-10.00	15.00-17.00	15.00-17.00	0.00-1.00
SAMPLE LOCATION	TB17	TB17	TB17	TB17	TB18	TB18	TB18	TB18	TB18	TB19
SAMPLE DATE	7/9/1997	7/9/1997	7/9/1997	7/9/1997	7/9/1997	7/9/1997	7/9/1997	7/9/1997	7/9/1997	7/1/1997
PARAMETER										
4-Aminobiphenyl	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
4-Aminodiphenylamine	< 5430	< 580	< 610	< 590	< 27000	< 590	< 590	< 630	< 630	< 1100 J
4-Bromophenyl phenyl ether	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
4-Chloro-m-cresol	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
4-Chlorophenylphenyl ether	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
4-Nitroaniline	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
4-Nitrophenol	< 2170 J	< 230 J	< 240 J	< 230 J	< 10800 J	< 230 J	< 240 J	< 250 J	< 250 J	< 440 J
5-Nitro-o-toluidine	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
7,12-dimethylbenz[a]anthracene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Acenaphthene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Acenaphthylene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Acetophenone	< 2820	< 300	< 320	< 310	< 14000	< 300	< 310	< 330	< 330	< 570 J
Aniline	< 3040	< 320	< 340	< 330	< 15100	< 330	< 330	< 350	< 350	< 620 J
Anthracene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Azobenzene	< 2600	< 280	< 290	< 280	< 13000	< 280	< 280	< 300	< 300	< 530 J
Benzidine	< 34700	< 3700	< 3880	< 3760	< 173000	< 3750	< 3800	< 4000	< 4000	< 7050 J
Benzo(a)anthracene	< 2820	< 300	< 320	< 310	< 14000	< 300	< 310	< 330	< 330	< 570 J
Benzo(a)pyrene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Benzo(b)fluoranthene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	450 J
Benzo(ghi)perylene	< 2390	< 250	< 270	< 260	< 11900	< 260	< 260	< 280	< 280	< 480 J
Benzo(k)fluoranthene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Benzoic Acid	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Benzyl Alcohol	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Benzyl butyl phthalate	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Bis(2-chloroethoxyethane)	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Bis(2-chloroethyl)ether	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Bis(2-chloroisopropyl)ether	< 2170 J	< 230 J	< 240 J	< 230 J	< 10800 J	< 230 J	< 240 J	< 250 J	< 250 J	< 440 J
Bis(2-ethylhexyl) phthalate	< 2600	< 280	390 B	300 B	< 13000	< 280	< 280	800 B	600 B	< 530 J
Bisphenol A	< 3910	< 420	< 440	< 420	< 19400	< 420	< 430	< 450	< 450	< 790 J
Carbazole	< 10900	< 1160	< 1210	< 1180	< 54000	< 1170	< 1190	< 1250	< 1250	< 2200 J
Chrysene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Cyclohexanone	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Di-n-butyl phthalate	7880 JB	8530 JB	12200 JB	6280 JB	< 10800 J	1060 JB	< 240 J	650 JB	9360 JB	2690 JB
Di-n-octyl phthalate	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Dibenzo(a,h)anthracene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Dibenzofuran	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Diethyl Phthalate	< 2170	2240	640	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Dimethylphthalate	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Ethyl Methane Sulfonate	< 3910	< 420	< 440	< 420	< 19400	< 420	< 430	< 450	< 450	< 790 J
Fluoranthene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Fluorene	< 2170 J	< 230 J	< 240 J	< 230 J	< 10800 J	< 230 J	< 240 J	< 250 J	< 250 J	< 440 J
Heptachlor	< 2390	< 250	< 270	< 260	< 11900	< 260	< 260	< 280	< 280	< 480 J
Hexachlorobenzene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Hexachlorobutadiene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Hexachlorocyclopentadiene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Hexachloroethane	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Indeno(1,3,cd)pyrene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Iso phorone	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Methyl methane sulfonate	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
N-Nitrosodibutylamine	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
N-Nitrosodimethylamine	< 2170 J	< 230 J	< 240 J	< 230 J	< 10800 J	< 230 J	< 240 J	< 250 J	< 250 J	< 440 J
N-Nitrosodiphenylamine	< 2820	< 300	< 320	< 310	< 14000	< 300	< 310	< 330	< 330	< 570 J
N-Nitrosodipropylamine	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
N-Nitrosopiperidine	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Naphthalene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Nitrobenzene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Pentachlorobenzene	< 3690	< 390	< 410	< 400	< 18300	< 400	< 400	< 430	< 430	< 750 J

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB17-0001 0.00-1.00 TB17 7/9/1997	SM010-TB17-0305 3.00-5.00 TB17 7/9/1997	SM010-TB17-1012 10.00-12.00 TB17 7/9/1997	SM010-TB17-1719 17.00-19.00 TB17 7/9/1997	SM010-TB18-0001 0.00-1.00 TB18 7/9/1997	SM010-TB18-0305 3.00-5.00 TB18 7/9/1997	SM010-TB18-0810 8.00-10.00 TB18 7/9/1997	SM010-TB18-1517 15.00-17.00 TB18 7/9/1997	SM010-TB18-1517FD 15.00-17.00 TB18 7/9/1997	SM010-TB19-0001 0.00-1.00 TB19 7/1/1997
Pentachloronitrobenzene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Pentachlorophenol	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Phenacetin	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Phenanthrene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Phenol	< 1300	< 140	< 150	< 140	< 6470	< 140	< 140	< 150	< 150	< 260 J
Pyrene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Pyridine	< 2390	< 250	< 270	< 260	< 11900	< 260	< 260	< 280	< 280	< 480 J
Trimethylphosphate	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
Triphenylphosphate	< 10900	< 1160	< 1210	< 1180	< 54000	< 1170	< 1190	< 1250	< 1250	< 2200 J
m,p-Cresol	< 3260	< 350	< 360	< 350	< 16200	< 350	< 360	< 380	< 380	< 660 J
m-Nitrotoluene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
m-Toluidine	< 4340	< 460	< 480	< 470	< 21600	< 470	< 470	< 500	< 500	< 880 J
o,p-Toluidine	< 11100	< 1180	< 1240	< 1200	< 55000	< 1190	< 1210	< 1280	< 1280	< 2250 J
o-Cresol	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
o-Nitrotoluene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
p-Chloroaniline	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
p-Dimethylenoazobenzene	< 2170	< 230	< 240	< 230	< 10800	< 230	< 240	< 250	< 250	< 440 J
p-Nitrotoluene	< 3260	< 350	< 360	< 350	< 16200	< 350	< 360	< 380	< 380	< 660 J
Metals (µg/kg)										
Antimony	< 434	< 462	< 470	< 470	< 432	< 468	< 475	< 480	< 480	< 441
Cadmium	575	821	< 470	665	744	636	1356	< 480	< 480	751
Chromium	8877	19102	18307	11823	8714	24181	19657	19961	18303	23113
Lead	8659	15759	13795	12514	9427	15181	15729	15462	15474	14499
Nickel	14809	24289	22901	16385	20563	25292	26565	23287	23131	70726
Miscellaneous (µg/kg)										
Percent Moisture	7.86%	13.5%	17.5%	14.9%	7.32%	14.6%	15.7%	20.1%	20.1%	9.28%
Total Organic Carbon	2300000	3500000	2300000	NA	NA	NA	NA	NA	NA	NA
BTU from ECD	NA	< 500 BTU	< 500 BTU	NA	NA	NA	NA	NA	NA	NA
Ignitability (Flash Point) for S	NA	Negative	Negative	NA	NA	NA	NA	NA	NA	NA
Percent Ash	NA	38 %	63 %	NA	NA	NA	NA	NA	NA	NA
pH in Water (Solid Sample)	NA	7.1 std	7.5 std	NA	NA	NA	NA	NA	NA	NA

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, additional informa

U=Nondetect at reported limit

<=Nondetect at reported limit

BLE 4.5-1
tical Results for
SWMU Group D: SWMUS 10, 12, 15 and 16

SAMPLE ID	SM010-TB19-0305	SM010-TB19-1820	SM010-TB20-0001	SM010-TB20-0305	M010-TB20-161	SM010-TB20-1617R	SM010-TB20-1820	SM010-TB21-0001	SM010-TB21-0305	SM010-TB21-0709
SAMPLE DEPTH(ft)	3.00-5.00	18.00-20.00	0.00-1.00	3.00-5.00	16.00-17.00	16.00-17.00	18.00-20.00	0.00-1.00	3.00-5.00	7.00-9.00
SAMPLE LOCATION	TB19	TB19	TB20	TB20	TB20	TB20	TB20	TB21	TB21	TB21
SAMPLE DATE	7/1/1997	7/1/1997	7/1/1997	7/1/1997	7/1/1997	7/17/1997	7/1/1997	7/1/1997	7/1/1997	7/1/1997
PARAMETER										
Volatiles (µg/kg)										
1,1,1,2-Tetrachloroethane	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
1,1,1-Trichloroethane	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
1,1,2,2-Tetrachloroethane	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
1,1,2-Trichloroethane	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
1,1-Dichloroethane	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
1,1-Dichloroethene	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
1,1-Dichloropropene	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
1,2,3-Trichlorobenzene	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
1,2,3-Trichloropropane	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
1,2,4-Trichlorobenzene	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
1,2,4-Trimethylbenzene	< 156	< 157	< 145	< 156	NA	< 166	< 300	73000	1330	255 J
1,2-Dibromo-3-chloropropane	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
1,2-Dibromoethane	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
1,2-Dichlorobenzene	< 300	< 303	313 J	875	NA	60200	504000	1640	< 303	984
1,2-Dichloroethane	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
1,2-Dichloropropane	< 456	< 460	< 424	< 456	NA	< 487	< 899	< 479	< 460	< 462
1,3,5-Trimethylbenzene	< 156	< 157	< 145	< 156	NA	< 166	< 300	23900	424 J	< 158
1,3-Dichlorobenzene	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
1,3-Dichloropropane	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
1,4-Dichlorobenzene	< 300	< 303	< 279	< 300	NA	1540	12000	< 315	< 303	< 304
2,2-Dichloropropane	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
2-Butanone (MEK)	< 1060	< 1070	< 982	< 1060	NA	< 1130	< 2160	< 1110	< 1070	< 1070
2-Chloroethyl Vinyl Ether	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
2-Chlorotoluene	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
2-Hexanone	< 456	< 460	< 424	< 456	NA	< 487	< 899	< 479	< 460	< 462
4-Chlorotoluene	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
4-Methyl-2-pentanone (MIK)	< 456	< 460	< 424	< 456	NA	< 487	< 899	< 479	< 460	< 462
Acetone	< 1060	< 1070	< 982	< 1060	NA	6150	< 2160	< 1110	< 1070	< 1070
Acrolein	< 3000	< 3030	< 2790	< 3000	NA	< 3200	< 6000	< 3150	< 3030	< 3040
Acrylonitrile	< 1560	< 1570	< 1450	< 1560	NA	< 1660	< 3000	< 1640	< 1570	< 1580
Allyl Chloride	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
Benzene	< 156	3030	167 J	899	NA	69100	588000	302 J	< 157	2920
Bromobenzene	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
Bromochloromethane	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
Bromodichloromethane	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
Bromoform	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
Bromomethane	< 456	< 460	< 424	< 456	NA	< 487	< 899	< 479	< 460	< 462
Carbon Disulfide	< 456	< 460	< 424	< 456	NA	< 487	< 899	< 479	< 460	< 462
Carbon Tetrachloride	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
Chlorobenzene	< 156	278 J	837	480 J	NA	8450	68300	< 164	< 157	583 J
Chloroethane	< 456	< 460	< 424	< 456	NA	< 487	< 899	< 479	< 460	< 462
Chloroform	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
Chloromethane	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
Dibromochloromethane	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
Dibromomethane	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
Dichlorodifluoromethane	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
Ethyl Methacrylate	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
Ethylbenzene	< 156	< 157	< 145	< 156	NA	< 166	< 300	2270	< 157	< 158
Freon 113	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
Freon 141b	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
Hexachlorobutadiene	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
Isopropylbenzene	< 456	< 460	< 424	< 456	NA	< 487	< 899	2270	< 460	< 462
Methyl Iodide	< 456	< 460	< 424	< 456	NA	< 487	< 899	< 479	< 460	< 462
Methylene Chloride	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB19-0305 3.00-5.00 TB19 7/1/1997	SM010-TB19-1820 18.00-20.00 TB19 7/1/1997	SM010-TB20-0001 0.00-1.00 TB20 7/1/1997	SM010-TB20-0305 3.00-5.00 TB20 7/1/1997	M010-TB20-161 16.00-17.00 TB20 7/1/1997	SM010-TB20-1617R 16.00-17.00 TB20 7/17/1997	SM010-TB20-1820 18.00-20.00 TB20 7/1/1997	SM010-TB21-0001 0.00-1.00 TB21 7/1/1997	SM010-TB21-0305 3.00-5.00 TB21 7/1/1997	SM010-TB21-0709 7.00-9.00 TB21 7/1/1997
PARAMETER										
Naphthalene	< 156	< 157	< 145	< 156	NA	< 166	< 300	17600	242 J	< 158
Styrene	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
Tetrachloroethene	< 156	< 157	< 145	< 156	NA	< 166	336 J	< 164	< 157	< 158
Toluene	< 156	< 157	458 J	22800	NA	8580	120000	970	< 157	207 J
Trichloroethene	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
Trichlorofluoromethane	< 300	702 J	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
Vinyl Acetate	< 456	< 460	< 424	< 456	NA	< 487	< 899	< 479	< 460	< 462
Vinyl Chloride	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
cis-1,2-Dichloroethene	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
cis-1,3-Dichloropropene	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
m+p-Xylene	< 156	< 157	< 145	< 156	NA	< 166	< 300	15100	169 J	< 158
n-Butylbenzene	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
n-Propylbenzene	< 156	< 157	< 145	< 156	NA	< 166	< 300	8310	< 157	< 158
o-Xylene	< 156	< 157	< 145	< 156	NA	< 166	< 300	5790	< 157	< 158
p-Isopropyltoluene	< 156	< 157	< 145	< 156	NA	1060	8510	1640	< 157	< 158
sec-Butylbenzene	< 156	< 157	< 145	< 156	NA	< 166	< 300	2900	< 157	< 158
tert-Butylbenzene	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
trans-1,2-Dichloroethene	< 300	< 303	< 279	< 300	NA	< 320	< 600	< 315	< 303	< 304
trans-1,3-Dichloropropene	< 156	< 157	< 145	< 156	NA	< 166	< 300	< 164	< 157	< 158
trans-1,4-Dichloro-2-butene	< 1560	< 1570	< 1450	< 1560	NA	< 1660	< 3000	< 1640	< 1570	< 1580
Semivolatile (µg/kg)	1									
1,2,3-Trichlorobenzene	< 290	< 290	< 270 J	< 290	< 15400 J	NA	< 57600	< 300	< 290	< 290
1,2,4,5-Tetrachlorobenzene	< 290	< 290	< 270 J	< 290	< 15400 J	NA	< 57600	< 300	< 290	< 290
1,2,4-Trichlorobenzene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
1,2-Dichlorobenzene	< 240	< 240	320 J	< 240	< 12800 J	NA	89200	820	460	20500
1,3-Dichlorobenzene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	560
1,4-Dichlorobenzene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	12500
1-Chloronaphthalene	< 600	< 610	< 560 J	< 600	< 32000 J	NA	< 120000	< 630	< 610	< 610
1-Methylnaphthalene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	9820	800	< 240
1-Naphthylamine	< 820	< 820	< 760 J	< 820	< 43500 J	NA	< 163000	< 860	< 820	< 830
2,3,4,6-Tetrachlorophenol	< 480	< 480	< 450 J	< 480	< 25600 J	NA	< 95900	< 500	< 480	< 490
2,3-Dichloroaniline	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
2,4,5-Trichlorophenol	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
2,4,6-Trichlorophenol	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
2,4-Dichlorophenol	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
2,4-Dimethylphenol	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
2,4-Dinitrophenol	< 1490	< 1500	< 1380 J	< 1490	< 79400 J	NA	< 297000	< 1560	< 1500	< 1510
2,4-Dinitrotoluene	< 240	< 240	450 J	< 240	20100 J	NA	1320000	700	< 240	< 240
2,4-Toluenediamine	< 1200	< 1210	< 1120 J	< 1200	< 64000 J	NA	< 240000	< 1260	< 1210	< 1220
2,6-Dichlorophenol	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
2,6-Dinitrotoluene	< 240	< 240	< 220 J	< 240	41100 J	NA	314000	< 250	< 240	47600
2-Chloronaphthalene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
2-Chlorophenol	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
2-Methylnaphthalene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	17400	1540	310
2-Naphthylamine	< 910	< 920	< 850 J	< 910	< 48700 J	NA	< 182000	< 960	< 920	< 920
2-Nitroaniline	< 290	< 290	< 270 J	< 290	< 15400 J	NA	< 57600	< 300	< 290	< 290
2-Nitrodiphenylamine	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
2-Nitrophenol	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
2-Picoline	< 890	< 900	< 830 J	< 890	< 47400 J	NA	< 177000	< 930	< 900	< 900
3,3'-Dichlorobenzidine	< 1460	< 1480	< 1360 J	< 1460	< 78100 J	NA	< 293000	< 1540	< 1480	< 1480
3-Methylcholanthrene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
3-Nitroaniline	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
4,4'-Methylenedianiline	< 2110	< 2130	< 1960 J	< 2110	< 113000 J	NA	< 422000	< 2220	< 2130	5740
4,6-Dinitro-o-cresol	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240

BLE 4.5-1
Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB19-0305	SM010-TB19-1820	SM010-TB20-0001	SM010-TB20-0305	M010-TB20-161	SM010-TB20-1617R	SM010-TB20-1820	SM010-TB21-0001	SM010-TB21-0305	SM010-TB21-0709
SAMPLE DEPTH (ft)	3.00-5.00	18.00-20.00	0.00-1.00	3.00-5.00	16.00-17.00	16.00-17.00	18.00-20.00	0.00-1.00	3.00-5.00	7.00-9.00
SAMPLE LOCATION	TB19	TB19	TB20	TB20	TB20	TB20	TB20	TB21	TB21	TB21
SAMPLE DATE	7/1/1997	7/1/1997	7/1/1997	7/1/1997	7/1/1997	7/1/1997	7/1/1997	7/1/1997	7/1/1997	7/1/1997
PARAMETER										
4-Aminobiphenyl	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
4-Aminodiphenylamine	< 600	< 610	< 560 J	< 600	< 32000 J	NA	< 120000	< 630	< 610	< 610
4-Bromophenyl phenyl ether	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
4-Chloro-m-cresol	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	640
4-Chlorophenylphenyl ether	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
4-Nitroaniline	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
4-Nitrophenol	< 240 J	< 240 J	< 220 J	< 240 J	< 12800 J	NA	< 48000 J	< 250 J	< 240 J	16200 J
5-Nitro-o-tolidine	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	11500
7,12-dimethylbenz[a]anthracene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Acenaphthene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Acenaphthylene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Acetophenone	< 310	< 310	< 290 J	< 310	< 16700 J	NA	< 62400	7760	< 310	< 320
Aniline	< 340	< 340	730 J	< 340	< 17900 J	NA	< 67200	< 350	< 340	4420
Anthracene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Azobenzene	< 290	< 290	< 270 J	< 290	< 15400 J	NA	< 57600	< 300	< 290	< 290
Benzidine	< 3840	< 3870	< 3570 J	< 3840	< 205000 J	NA	< 767000	< 4030	< 3870	< 3890
Benz(a)anthracene	< 310	< 310	< 290 J	< 310	< 16700 J	NA	< 62400	< 330	< 310	< 320
Benz(a)pyrene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Benz(b)fluoranthene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Benz(g)perylene	< 260	< 270	< 250 J	< 260	< 14100 J	NA	< 52800	< 280	< 270	< 270
Benz(k)fluoranthene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Benzoic Acid	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Benzyl Alcohol	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Benzyl butyl phthalate	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Bis(2-chlorothoxymethane)	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	1100
Bis(2-chloroethyl)ether	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	5540
Bis(2-chloroisopropyl)ether	< 240 J	1490 J	< 220 J	< 240 J	< 12800 J	NA	< 48000 J	< 250 J	< 240 J	< 240 J
Bis(2-ethylhexyl) phthalate	< 290	930 B	310 JB	490 B	< 15400 J	NA	< 57600	980 B	1160 B	370 B
Bisphenol A	< 430	< 440	1560 JB	4150	< 23100 J	NA	< 86300	1840	3850	5100
Carbazole	< 1200	< 1210	< 1120 J	< 1200	< 64000 J	NA	< 240000	< 1260	< 1210	< 1220
Chrysene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Cyclohexanone	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Di-n-butyl phthalate	330 J	990 J	1800 JB	520 J	< 12800 J	NA	< 48000 J	1440 J	1160 J	520 J
Di-n-octyl phthalate	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	350	< 240	1140
Dibenzo(a,h)anthracene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Dibenzofuran	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Diethyl Phthalate	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Dimethylphthalate	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Ethyl Methane Sulfonate	< 430	< 440	< 400 J	< 430	< 23100 J	NA	< 86300	< 450	< 440	< 440
Fluoranthene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Fluorene	< 240 J	< 240 J	< 220 J	< 240 J	< 12800 J	NA	< 48000 J	< 250 J	< 240 J	< 240 J
Heptachlor	< 260	< 270	< 250 J	< 260	< 14100 J	NA	< 52800	< 280	< 270	< 270
Hexachlorobenzene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Hexachlorobutadiene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Hexachlorocyclopentadiene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Hexachloroethane	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Indeno(1,2,3-cd)pyrene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Ispophrone	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Methyl methane sulfonate	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
N-Nitrosodibutylamine	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
N-Nitrosodimethylamine	< 240 J	< 240 J	< 220 J	< 240 J	< 12800 J	NA	< 48000 J	< 250 J	< 240 J	< 240 J
N-Nitrosodiphenylamine	< 310	< 310	< 290 J	< 310	< 16700 J	NA	< 62400	< 330	< 310	< 320
N-Nitrosodipropylamine	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
N-Nitrosopiperidine	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Naphthalene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	9040	540	< 240
Nitrobenzene	< 240	< 240	< 220 J	< 240	415000 J	NA	2390000	< 250	600	113000
Pentachlorobenzene	< 410	< 410	< 380 J	< 410	< 21800 J	NA	< 81500	< 430	< 410	< 410

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB19-0305 3.00-5.00 TB19 7/1/1997	SM010-TB19-1820 18.00-20.00 TB19 7/1/1997	SM010-TB20-0001 0.00-1.00 TB20 7/1/1997	SM010-TB20-0305 3.00-5.00 TB20 7/1/1997	M010-TB20-161 16.00-17.00 TB20 7/1/1997	SM010-TB20-1617R 16.00-17.00 TB20 7/17/1997	SM010-TB20-1820 18.00-20.00 TB20 7/1/1997	SM010-TB21-0001 0.00-1.00 TB21 7/1/1997	SM010-TB21-0305 3.00-5.00 TB21 7/1/1997	SM010-TB21-0709 7.00-9.00 TB21 7/1/1997
PARAMETER										
Pentachloronitrobenzene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Pentachlorophenol	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Phenacetin	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Phenanthrene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Phenol	< 140	< 150	550 JB	< 140	< 7680 J	NA	< 28800	< 150	< 150	720
Pyrene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Pyridine	< 260	< 270	< 250 J	< 260	< 14100 J	NA	< 52800	< 280	< 270	< 270
Trimethylphosphate	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
Triphenylphosphate	< 1200	< 1210	< 1120 J	< 1200	< 64000 J	NA	< 240000	< 1260	< 1210	< 1220
m,p-Cresol	< 360	< 360	< 330 J	610	< 19200 J	NA	< 71900	< 380	< 360	< 360
m-Nitrotoluene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	3400
m-Toluidine	< 480	< 480	< 450 J	< 480	< 25600 J	NA	< 95900	< 500	< 480	1130
o,p-Toluidine	< 1220	< 1230	< 1140 J	< 1220	< 65300 J	NA	< 245000	< 1280	< 1230	< 1240
o-Cresol	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
o-Nitrotoluene	< 240	< 240	< 220 J	< 240	49000 J	NA	440000	< 250	< 240	26700
p-Chloroaniline	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	780
p-Dimethylaminoazobenzene	< 240	< 240	< 220 J	< 240	< 12800 J	NA	< 48000	< 250	< 240	< 240
p-Nitrotoluene	< 360	< 360	< 330 J	< 360	40300 J	NA	343000	< 380	< 360	< 360
Metals (µg/kg)										
Antimony	< 480	< 470	< 446	< 480	< 512	NA	< 480	< 482	< 470	< 486
Cadmium	553	< 470	849	833	770	NA	939	< 482	< 470	717
Chromium	15228	12280	16704	19134	20747	NA	11835	29016	16577	15395
Lead	14076	11363	12467	17172	15218	NA	11027	11615	16665	16276
Nickel	25559	18467	139236	28019	17639	NA	15286	39472	26145	40595
Miscellaneous (µg/kg)										
Percent Moisture	16.6%	17.4%	10.4%	16.6%	22%	NA	16.6%	20.6%	17.4%	17.7%
Total Organic Carbon	NA	NA	2800000	1800000	NA	NA	NA	NA	NA	NA
BTU from ECD	NA	NA	NA	< 500 BTU	NA	NA	NA	NA	NA	NA
Ignitability (Flash Point) for S	NA	NA	NA	Negative	NA	NA	NA	NA	NA	NA
Percent Ash	NA	NA	NA	82 %	NA	NA	NA	NA	NA	NA
pH in Water (Solid Sample)	NA	NA	NA	7.2 std	NA	NA	NA	NA	NA	NA

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, additional informa

U=Nondetect at reported limit

<=Nondetect at reported limit

TABLE 4.5-1
Statistical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB21-1113	SM010-TB21-1820	SM010-TB22-0001	SM010-TB22-0305	SM010-TB22-0911	SM010-TB23-0001	SM010-TB23-0305	SM010-TB23-0810	SM010-TB24-0001	SM010-TB24-0305
SAMPLE DEPTH(ft)	11.00-13.00	18.00-20.00	0.00-1.00	3.00-5.00	9.00-11.00	0.00-1.00	3.00-5.00	8.00-10.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB21	TB21	TB22	TB22	TB22	TB23	TB23	TB23	TB24	TB24
SAMPLE DATE	7/1/1997	7/1/1997	11/15/1999	11/15/1999	11/15/1999	11/12/1999	11/12/1999	11/12/1999	11/16/1999	11/16/1999
PARAMETER										
Volatile (µg/kg)										
1,1,1,2-Tetrachloroethane	< 633	< 320	<24	<24	<54	<22	<22	<23	<24	<23
1,1,1-Trichloroethane	< 316	< 166	<47	<48	<1100	<44	<44	<45	<47	<47
1,1,2,2-Tetrachloroethane	< 316	< 166	<47	<48	<1100	<44	<44	<45	<47	<47
1,1,2-Trichloroethane	< 633	< 320	<35	<36	<800	<33	<33	<34	<36	<35
1,1-Dichloroethane	< 316	< 166	<47	<48	<1100	<44	<44	<45	<47	<47
1,1-Dichloroethene	< 633	< 320	<35	<36	<800	<33	<33	<34	<36	<35
1,1-Dichloropropene	< 316	< 166	<24	<24	<540	<22	<22	<23	<24	<23
1,2,3-Trichlorobenzene	< 316	< 166	<24	<24	<540	<22	<22	<23	<24	<23
1,2,3-Trichloropropane	< 316	< 166	<59	<60	<1300	<55	<55	<56	<59	<59
1,2,4-Trichlorobenzene	< 316	< 166	<35	<36	<800	<33	<33	<34	<36	<35
1,2,4-Trimethylbenzene	< 316	< 166	<24	<24	<540	<22	<22	<23	<24	<23
1,2-Dibromo-3-chloropropane	< 633	< 320	<110	<110	<2400	<100	<99	<100	<110	<110
1,2-Dibromoethane	< 316	< 166	<47	<48	<1100	<44	<44	<45	<47	<47
1,2-Dichlorobenzene	177000	34600	390	6500	80000	22	22	<23	140	<23
1,2-Dichloroethane	< 633	< 320	<12	<12	<270	<11	<11	<11	<12	<12
1,2-Dichloropropane	< 949	< 487	<35	<36	<800	<33	<33	<34	<36	<35
1,3,5-Trimethylbenzene	< 316	< 166	<24	<24	<540	<22	<22	<23	<24	<23
1,3-Dichlorobenzene	< 633	< 320	<35	<36	<800	<33	<33	<34	<36	<35
1,3-Dichloropropane	< 316	< 166	<47	<48	<1100	<44	<44	<45	<47	<47
1,4-Dichlorobenzene	4180	973	64	310	3100	<22	<22	<23	<24	<23
2,2-Dichloropropane	< 316	< 166	<24	<60	<1300	<55	<55	<56	<59	<59
2-Butanone (MEK)	< 2280	< 1130	<140	<140	<3200	<130	<130	<140	<140	<140
2-Chloroethyl Vinyl Ether	< 633	< 320	<59	<600	<1300	<55	<55	<56	<59	<59
2-Chrotoluene	< 316	< 166	<24	<600	<540	<22	<22	<23	<24	<23
2-Hexanone	< 949	< 487	<59	<600	<1300	<55	<55	<56	<59	<59
4-Chlorotoluene	< 316	< 166	<35	<36	<800	<33	<33	<34	<36	<35
4-Methyl-2-pentanone (MIK)	< 949	< 487	<59	<600	<1300	<55	<55	<56	<59	<59
Acetone	< 2280	< 1130	<370	<370	<8300	450B	380B	<350	<37	<36
Acrolein	< 6330	< 3200	<71	<72	<1600	<66	<66	<68	<71	<70
Acrylonitrile	< 3160	< 1660	<59	<600	<1300	<55	<55	<56	<59	<59
Allyl Chloride	< 316	< 166	NA							
Benzene	203000	8190	<24	<24	<540	<22	<22	<23	<24	<23
Bromobenzene	< 316	< 166	<35	<36	<800	<33	<33	<34	<36	<35
Bromochloromethane	< 316	< 166	<35	<36	<800	<33	<33	<34	<36	<35
Bromodichloromethane	< 633	< 320	<24	<24	<540	<22	<22	<23	<24	<23
Bromoform	< 316	< 166	<59	<60	<1300	<55	<55	<56	<59	<59
Bromomethane	< 949	< 487	<35	<36	<800	<33	<33	<34	<36	<35
Carbon Disulfide	< 949	< 487	<12	<12	<270	<11	<11	<11	<12	<12
Carbon Tetrachloride	< 316	< 166	<35	<36	<800	<33	<33	<34	<36	<35
Chlorobenzene	8610	6150	590	490	26000	18	<11	<11	78	<12
Chloroethane	< 949	< 487	<110	<110	<2400	<100	<99	<100	<11	<11
Chloroform	< 316	< 166	<35	<36	<800	<33	<33	<34	<36	<35
Chloromethane	< 633	< 320	<24	<24	<540	<22	<22	<23	<24	<23
Dibromochloromethane	< 316	< 166	<59	<60	<540	<55	<55	<56	<59	<59
Dibromomethane	< 316	< 166	<59	<60	<1300	<55	<55	<56	<59	<59
Dichlorodifluoromethane	< 633	< 320	<59	<60	<1300	<55	<55	<56	<59	<59
Ethyl Methacrylate	< 316	< 166	<35	<36	<800	<33	<33	<34	<36	<35
Ethylbenzene	< 316	< 166	<12	<12	<270	<11	<11	<11	<12	<12
Freon 113	< 633	< 320	NA							
Freon 141b	< 316	< 166	NA							
Hexachlorobutadiene	< 633	< 320	<59	<60	<1300	<55	<55	<560	<59	<59
Isopropylbenzene	< 949	< 487	<12	<12	<270	<11	<11	<11	<12	<12
Methyl Iodide	< 949	< 487	<24	<24	<540	<22	<22	<23	<24	<23
Methylene Chloride	< 633	< 320	51B	35B	<540	46B	44B	46B	51B	51B

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB21-1113	SM010-TB21-1820	SM010-TB22-0001	SM010-TB22-0305	SM010-TB22-0911	SM010-TB23-0001	SM010-TB23-0305	SM010-TB23-0810	SM010-TB24-0001	SM010-TB24-0305
SAMPLE DEPTH(ft)	11.00-13.00	18.00-20.00	0.00-1.00	3.00-5.00	9.00-11.00	0.00-1.00	3.00-500	8.00-10.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB21	TB21	TB22	TB22	TB22	TB23	TB23	TB23	TB24	TB24
SAMPLE DATE	7/1/1997	7/1/1997	11/15/1999	11/15/1999	11/15/1999	11/12/1999	11/12/1999	11/12/1999	11/16/1999	11/16/1999
PARAMETER										
Naphthalene	<316	<166	<12	<12	<270	<11	<11	<110	<12	<12
Styrene	<316	<166	<35	<36	<800	<33	<33	<34	<36	<35
Tetrachloroethene	<316	<166	<300	<300	<6700	<280	<280	<280	<300	<290
Toluene	5570	551 J	<24	<24	<540	<22	<22	<23	<24	<23
Trichloroethene	<316	<166	<47	<48	<1100	<44	<44	<45	<47	<47
Trichlorofluoromethane	<633	<320	<59	<60	<1300	<55	<55	<45	<59	<59
Vinyl Acetate	<949	<487	<280	<290	<800	<270	<260	<270	<280	<280
Vinyl Chloride	<633	<320	<35	<36	<540	<33	<33	<34	<36	<35
cis-1,2-Dichloroethene	<633	<320	<24	<540	<540	<22	<22	<23	<24	<23
cis-1,3-Dichloropropene	<316	<166	<35	<800	<800	<33	<33	<34	<36	<23
m+p-Xylene	<316	<166	<35	<800	<800	<33	<33	<34	<36	<35
n-Butylbenzene	<316	<166	<24	<24	<540	<22	<22	<23	<24	<23
n-Propylbenzene	<316	<166	<24	<24	<540	<22	<22	<23	<24	<23
o-Xylene	<316	<166	<35	<36	<800	<33	<33	<32	<36	<35
p-Isopropyltoluene	1770	<166	<24	40	<540	<22	<22	<23	<24	<23
sec-Butylbenzene	<316	<166	<12	<12	<270	<11	<11	<11	<12	<12
tert-Butylbenzene	<316	<166	<24	<24	<540	<22	<22	<23	<24	<23
trans-1,2-Dichloroethene	<633	<320	<35	<36	<800	<33	<33	<34	<36	<35
trans-1,3-Dichloropropene	<316	<166	<35	<36	<800	<33	<33	<34	<36	<35
trans-1,4-Dichloro-2-butene	<3160	<1660	<47	<48	<1100	<44	<44	<45	<47	<47
Semivolatiles (µg/kg)										
1,2,3-Trichlorobenzene	<30400 J	<3070	<120	<120	<34000	<110	<110	<110	<120	<120
1,2,4,5-Tetrachlorobenzene	<30400 J	<3070	<130	<130	<37000	<120	<120	<120	<130	<130
1,2,4-Trichlorobenzene	<25300 J	<2560	<120	<120	<34000	<110	<110	<110	<120	<120
1,2-Dichlorobenzene	37000 J	15400	2300	16000	270000	<100	<99	180	130	<110
1,3-Dichlorobenzene	<25300 J	<2560	<94	<96	<27000	<89	<88	<90	<95	<94
1,4-Dichlorobenzene	<25300 J	<2560	320	820	<30000	<100	<99	<100	<110	<110
1-Chloronaphthalene	<63300 J	<6400	<110	<110	<30000	<100	<99	<100	<110	<110
1-Methylnaphthalene	<25300 J	<2560	<120	<120	<34000	<110	<110	<110	<120	<120
1-Naphthylamine	<86100 J	<8710	<910	<930	<260000	<850	<850	<87	<910	<900
2,3,4,6-Tetrachlorophenol	<50600 J	<5120	<94	<96	<27000	<89	<88	<90	<95	<94
2,3-Dichloroaniline	<25300 J	<2560	<120	<120	<34000	<110	<110	<110	<120	<120
2,4,5-Trichlorophenol	<25300 J	<2560	<94	<96	<27000	<89	<88	<90	<95	<94
2,4,6-Trichlorophenol	<25300 J	<2560	<120	<120	<34000	<110	<110	<110	<120	<120
2,4-Dichlorophenol	<25300 J	<2560	<130	<130	<37000	<120	<120	<120	<130	<130
2,4-Dimethylphenol	<25300 J	<2560	<130	<130	<37000	<120	<120	<120	<130	<130
2,4-Dinitrophenol	<157000 J	<15900	<830	<840	<230000	<780	<770	<790	<830	<820
2,4-Dinitrotoluene	362000 J	356000	520	200	40000	530	<99	400	<110	<110
2,4-Toluenediamine	<127000 J	<12800	1400UJ	<3700	12000000J	<400	<3300	<3400	<3600	<3600
2,6-Dichlorophenol	<25300 J	<2560	<130	<130	<37000	<120	<120	<120	<130	<130
2,6-Dinitrotoluene	74900 J	83200	<130	<130	<37000	360	<120	120	<130	<130
2-Chloronaphthalene	<25300 J	<2560	<130	<130	<37000	<120	<120	<120	<130	<130
2-Chlorophenol	<25300 J	<2560	<110	<110	<30000	<100	<99	<100	<110	<110
2-Methylnaphthalene	<25300 J	<2560	<120	<120	<34000	<110	<110	<110	<120	<120
2-Naphthylamine	<96200 J	<9730	<730	<750	<210000	<690	<680	<700	<730	<730
2-Nitroaniline	<30400 J	<3070	<120	<120	<34000	<110	<110	<110	<120	<120
2-Nitrodiphenylamine	<25300 J	<2560	<94	<96	<27000	<89	<88	<90	<95	<94
2-Nitrophenol	<25300 J	<2560	<110	<110	<30000	<100	<99	<100	<110	<110
2-Picoline	<93700 J	<9470	<110	<110	<30000	<100	<99	<100	<110	<110
3,3'-Dichlorobenzidine	<154000 J	<15600	<280	<290	<80000	<70	<260	<270	<280	<280
3-Methylcholanthrene	<25300 J	<2560	<130	<130	<37000	<120	<120	<120	<130	<130
3-Nitroaniline	<25300 J	<2560	<71	<72	<20000	<66	<66	<68	<71	<70
4,4' Methyleneedianiline	<223000 J	<22500	3600	<1500	490000	<1400	<1400	<1400	<1500	<1500
4,6-Dinitro-o-cresol	<25300 J	<2560	<400	<410	<1100000	<380	<370	<380	<400	<400

TABLE 4.5-1
Sample Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB21-1113	SM010-TB21-1820	SM010-TB22-0001	SM010-TB22-0305	SM010-TB22-0911	SM010-TB23-0001	SM010-TB23-0305	SM010-TB23-0810	SM010-TB24-0001	SM010-TB24-0305
SAMPLE DEPTH(ft)	11.00-13.00	18.00-20.00	0.00-1.00	3.00-5.00	9.00-11.00	0.00-1.00	3.00-5.00	8.00-10.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB21	TB21	TB22	TB22	TB22	TB23	TB23	TB23	TB24	TB24
SAMPLE DATE	7/1/1997	7/1/1997	11/15/1999	11/15/1999	11/15/1999	11/12/1999	11/12/1999	11/12/1999	11/16/1999	11/16/1999
PARAMETER										
4-Aminobiphenyl	<25300 J	<2560	<580	<590	<160000	<540	<540	<550	<580	<570
4-Aminodiphenylamine	<63300 J	<6400								
4-Bromophenyl phenyl ether	<25300 J	<2560	<130	<130	<37000	<140	<120	<120	<130	<130
4-Chloro-m-cresol	<25300 J	<2560	<150	<160	<44000	<140	<140	<150	<150	<150
4-Chlorophenylphenyl ether	<25300 J	<2560	<120	<120	<34000	<110	<110	<110	<120	<120
4-Nitroaniline	<25300 J	<2560	<94	<96	<27000	<89	<88	<900	<95	<94
4-Nitrophenol	<25300 J	<2560 J	<370	<370	<100000	<340	<340	<350	<370	<360
5-Nitro-o-toluidine	<25300 J	<2560	<110	<110	<30000	<100	<99	<100	<110	<110
7,12-dimethylbenz[a]anthracene	<25300 J	<2560	<170	<170	<47000	<160	<150	<160	<170	<160
Acenaphthene	<25300 J	<2560	<130	<130	<37000	<120	<120	<120	<130	<130
Acenaphthylene	<25300 J	<2560	<130	<130	<37000	<120	<120	<120	<130	<130
Acetophenone	<32900 J	<3330	<110	<130	<300000	<100	<99	<100	<110	<110
Aniline	<35400 J	<3590	2600	1200	170000	<490	<480	<500	<520	<520
Anthracene	<25300 J	<2560	<110	<110	<30000	<100	<99	<100	<110	<110
Azobenzene	<30400 J	<3070	<130	<130	<37000	<120	<120	<120	<130	<130
Benzidine	<405000 J	<41000	<1500	<1500	<430000	<1400	<1400	<1400	<1500	<1500
Benzo(a)anthracene	<32900 J	<3330	<130	<130	<37000	<120	<120	<120	<130	<130
Benzo(a)pyrene	<25300 J	<2560	<130	<130	250000	<120	<120	<120	<130	<130
Benzo(b)fluoranthene	<25300 J	<2560	<110	<110	<30000	<100	<99	<100	<110	<110
Benzo(ghi)perylene	<27900 J	<2820	<210	<220	<60000	<200	<200	<200	<210	<210
Benzo(k)fluoranthene	<25300 J	<2560	<140	160	530000	<130	<130	<140	<140	<140
Benzoic Acid	<25300 J	<2560	<1300	<1300	<370000	<1200	<1200	<1200	<1300	<1300
Benzyl Alcohol	<25300 J	<2560	<110	<110	<30000	<100	<99	<100	<110	<110
Benzyl butyl phthalate	<25300 J	<2560	<120	<120	<34000	<110	<110	<110	<120	<120
Bis(2-chloroethyl)methane	<25300 J	<2560	<120	<120	<34000	<110	<110	<110	<120	<120
Bis(2-chloroethyl)ether	<25300 J	<2560	<110	<110	<30000	<100	<99	<100	<110	<110
Bis(2-chloroisopropyl)ether	<25300 J	<2560 J	<110	<110	<30000	<100	<99	<100	<110	<110
Bis(2-ethylhexyl) phthalate	<30400 J	<3070	<130	160	<37000	<120	<120	<120	<130	<130
Bisphenol A	<45600 J	<4610	3200	540	<50000	<170	<160	<170	<180	<180
Carbazole	<127000 J	<12800	<83	<84	<23000	<78	<77	<79	<83	<82
Chrysene	<25300 J	<2560	<130	<130	<37000	<120	<120	<120	<130	<130
Cyclohexanone	<25300 J	<2560	<59	<60	<17000	<55	<55	<56	<59	<59
Di-n-butyl phthalate	<25300 J	<2560 J	120UB	120UB	<30000	<100	<99	110UB	170UB	120UB
Di-n-octyl phthalate	<25300 J	<2560	<140	<140	<40000	<130	<130	<140	<170	<170
Dibenz(a,h)anthracene	<25300 J	<2560	<150	<160	<44000	<100	<140	<150	<150	<150
Dibenzofuran	<25300 J	<2560	<110	<110	<30000	<100	<99	<100	<110	<110
Diethyl Phthalate	<25300 J	<2560	<110	<110	<30000	<100	<99	<100	<110	<110
Dimethylphthalate	<25300 J	<2560	<110	<110	<30000	<100	<99	<100	<110	<110
Ethyl Methane Sulfonate	<45600 J	<4610	<94	<96	<27000	<89	<99	<90	<95	<94
Fluoranthene	<25300 J	<2560	<120	<120	<34000	<110	<110	110	240	<120
Fluorene	<25300 J	<2560 J	<130	<130	<37000	<120	<120	<120	<130	<130
Heptachlor	<27900 J	<2820	<94	<96	<27000	<89	<88	<90	<95	<94
Hexachlorobenzene	<25300 J	<2560	<170	<170	<47000	<160	<150	<160	<160	<160
Hexachlorobutadiene	<25300 J	<2560	<110	<110	<30000	<100	<99	<100	<110	<110
Hexachlorocyclopentadiene	<25300 J	<2560	<1600	<1600	<450000	<1500	<1500	<1500	<1600	<1600
Hexachloroethane	<25300 J	<2560	<110	<110	<30000	<100	<99	<100	<110	<110
Indeno(1,2,3-cd)pyrene	<25300 J	<2560	<170	<170	<47000	<160	<130	<160	<160	<160
Isophorone	<25300 J	<2560	<140	<140	<40000	<130	<150	<140	<140	<140
Methyl methane sulfonate	<25300 J	<2560	<120	<120	<34000	<110	<110	<200	<120	<120
N-Nitrosodibutylamine	<25300 J	<2560	<140	<140	<40000	<130	<130	<140	<140	<140
N-Nitrosodimethylamine	<25300 J	<2560 J	<110	<110	<30000	<100	<99	<100	<110	<110
N-Nitrosodiphenylamine	<32900 J	<3330	<330	<340	<94000	<310	<310	<320	<330	<330
N-Nitrosodipropylamine	<25300 J	<2560	<110	<110	<30000	<100	<99	<100	<110	<110
N-Nitrosopiperidine	<25300 J	<2560	<120	<120	<34000	<110	<110	<110	<120	<120
Naphthalene	<25300 J	<2560	<120	<120	<34000	<110	<110	<110	<120	<120
Nitrobenzene	914000 J	175000	<110	<110	<30000	140	<99	140	<110	<110
Pentachlorobenzene	<43000 J	<4350	<130	<130	<37000	<120	<120	<120	<130	<130

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB21-1113	SM010-TB21-1820	SM010-TB22-0001	SM010-TB22-0305	SM010-TB22-0911	SM010-TB23-0001	SM010-TB23-0305	SM010-TB23-0810	SM010-TB24-0001	SM010-TB24-0305
SAMPLE DEPTH(ft)	11.00-13.00	18.00-20.00	0.00-1.00	3.00-5.00	9.00-11.00	0.00-1.00	3.00-5.00	8.00-10.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB21	TB21	TB22	TB22	TB22	TB23	TB23	TB23	TB24	TB24
SAMPLE DATE	7/1/1997	7/1/1997	11/15/1999	11/15/1999	11/12/1999	11/12/1999	11/12/1999	11/12/1999	11/16/1999	11/16/1999
PARAMETER										
Pentachloronitrobenzene	< 25300 J	< 2560	<83	<84	<23000	<78	<77	<79	<83	<82
Pentachlorophenol	< 25300 J	< 2560	<300	<300	<84000	<28	<280	<280	<300	<290
Phenacetin	< 25300 J	< 2560	<110	<110	<30000	<100	<99	<100	<110	<110
Phenanthrene	< 25300 J	< 2560	<120	<120	<14000	<110	<110	<110	160	<120
Phenol	< 15200 J	< 1540	1200	<120	<34000	<110	<110	<110	<120	<120
Pyrene	< 25300 J	< 2560	<130	<130	<37000	<120	<120	<120	160	<130
Pyridine	< 27900 J	< 2820	<110	<110	<30000	<100	<99	<100	<110	<110
Trimethylphosphate	< 25300 J	< 2560	<110	<110	<30000	<100	<99	<100	<110	<110
Triphenylphosphate	< 127000 J	< 12800	<150	<110	<44000	<140	<140	<150	<150	<150
m,p-Cresol	< 38000 J	< 3840	<210	<220	<60000	<200	<200	<200	<210	<210
m-Nitrotoluene	< 25300 J	4790	<120	<120	<34000	<89	<110	<110	<120	<120
m-Toluidine	< 50600 J	< 5120	<94	<96	<27000	<89	<88	<90	<95	<94
o,p-Toluidine	< 129000 J	< 13100	140	<84	<23000	<78	<77	<79	<83	<82
o-Cresol	< 25300 J	< 2560	<94	<96	<27000	<89	<88	<90	<95	<94
o-Nitrotoluene	81300 J	45300	<130	<130	<37000	<120	<120	<120	<130	<130
p-Chloroaniline	< 25300 J	< 2560	16000	9800	1000000	<89	<88	<90	<95	<94
p-Dimethylaminoazobenzene	< 25300 J	< 2560	<150	<160	<44000	<140	<140	<150	<150	<150
p-Nitrotoluene	53700 J	53500	<110	<110	<37000	<100	<99	<100	<130	<130
Metals (µg/kg)										
Antimony	< 506	< 512	<2360	<2400	<2680	<2210	<2200	<2250	<2370	<2340
Cadmium	801	770	<590	<601	<670	<554	<550	<563	<592	<586
Chromium	14157	13494	4880	7030	3550	2540	4920	3150	6500	4430
Lead	15028	11999	18900	23000	15100	9280	10500	9810	15900	13600
Nickel	22058	15469	31400	20400	1080000	5840	6900	9400	8250	4620
Miscellaneous (µg/kg)										
Percent Moisture	21.0%	21.9%	15.3%	16.8%	25.4%	9.7%	9.1%	11.2%	15.6%	14.7%
Total Organic Carbon	NA									
BTU from ECD	NA									
Ignitability (Flash Point) for S	NA									
Percent Ash	NA									
pH in Water (Solid Sample)	NA									

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, additional information

U=Nondetect at reported limit

<=Nondetect at reported limit

BLE 4.5-1
tical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB24-0305D	SM010-TB24-2123	SM010-TB25-0001	SM010-TB25-0305	SM010-TB25-1820	SM012-TB01-0001	SM012-TB01-0103	SM012-TB01-0305	SM012-TB01-0305	SM012-TB01-0709
SAMPLE DEPTH(ft)	3.00-5.00	21.00-23.00	0.00-1.00	3.00-5.00	18.00-20.00	0.00-1.00	1.00-3.00	3.00-5.00	3.00-5.00	7.00-9.00
SAMPLE LOCATION	TB24	TB24	TB25	TB25	TB25	TB01	TB01	TB01	TB01	TB01
SAMPLE DATE	11/16/1999	11/16/1999	11/12/1999	11/12/1999	11/12/1999	6/25/1997	11/12/1999	6/25/1997	11/12/1999	6/25/1997
PARAMETER										
Volatiles (µg/kg)										
1,1,1,2-Tetrachloroethane	<23	<25	<23	<24	<23	<286	NA	<369	NA	<367
1,1,1-Trichloroethane	<47	<5	<46	<47	<47	<149	NA	<192	NA	<191
1,1,2,2-Tetrachloroethane	<47	<5	<46	<47	<47	<149	NA	<192	NA	<191
1,1,2-Trichloroethane	<35	<37	<34	<36	<35	<286	NA	<369	NA	<367
1,1-Dichloroethane	<47	<5	<46	<47	<47	<149	NA	<192	NA	<191
1,1-Dichloroethene	<35	<37	<34	<36	<35	<286	NA	<369	NA	<367
1,1-Dichloropropene	<23	<25	<23	<24	<23	<149	NA	<192	NA	<191
1,2,3-Trichlorobenzene	<23	<25	<23	<24	<23	<149	NA	<192	NA	<191
1,2,3-Trichloropropane	<58	<62	<57	<59	<58	<149	NA	<192	NA	<191
1,2,4-Trichlorobenzene	<35	<37	<34	<36	<35	<149	NA	<192	NA	<191
1,2,4-Trimethylbenzene	<23	<25	<23	<24	<23	<149	NA	<192	NA	<191
1,2-Dibromo-3-chloropropane	<100	<110	<100	<100	<100	<286	NA	<369	NA	<367
1,2-Dibromoethane	<47	<50	<46	<47	<47	<149	NA	<192	NA	<191
1,2-Dichlorobenzene	<23	150	<23	<24	<23	52600	NA	41300	NA	13000
1,2-Dichloroethane	<12	<12	<11	<12	<12	<286	NA	<369	NA	<367
1,2-Dichloropropane	<35	<37	<34	<36	<35	<435	NA	<560	NA	<557
1,3,5-Trimethylbenzene	<23	<25	<23	<24	<23	<149	NA	<192	NA	<191
1,3-Dichlorobenzene	<35	<37	<34	<36	<35	<286	NA	<369	NA	<367
1,3-Dichloropropane	<47	<50	<46	<47	<47	<149	NA	<192	NA	<191
1,4-Dichlorobenzene	<23	<25	<23	<24	<23	778	NA	531 J	NA	<367
2,2-Dichloropropane	<58	<62	<57	<24	<58	<149	NA	<192	NA	<191
2-Butanone (MEK)	<140	<150	<57	<140	<140	<1010	NA	<1300	NA	<1290
2-Chloroethyl Vinyl Ether	<58	<62	<57	<59	<58	<286	NA	<369	NA	<367
2-Chrotoluene	<23	<25	<23	<24	<23	<149	NA	<192	NA	<191
2-Hexanone	<58	<62	<57	<59	<58	<435	NA	<560	NA	<557
4-Chrotoluene	<35	<37	<34	<36	<35	<149	NA	<192	NA	<191
4-Methyl-2-pentanone (MIK)	<59	<62	<57	<59	<58	<435	NA	<560	NA	<557
Acetone	<360	<390	370B	410B	<36	<1010	NA	<1300	NA	<1290
Acrolein	<70	<75	<68	<71	<70	<2860	NA	<3690	NA	<3670
Acrylonitrile	<58	<62	<57	<59	<58	<1490	NA	<1920	NA	<1910
Allyl Chloride	NA	NA	NA	NA	NA	<149	NA	<192	NA	<191
Benzene	<23	<25	<23	<24	<23	<149	NA	826 J	NA	411 J
Bromobenzene	<35	<37	<34	<36	<35	<149	NA	<192	NA	<191
Bromochloromethane	<35	<37	<34	<36	<35	<149	NA	<192	NA	<191
Bromodichloromethane	<23	<62	<23	<24	<23	<286	NA	<369	NA	<367
Bromoform	<58	<62	<57	<59	<58	<149	NA	<192	NA	<191
Bromomethane	<35	<37	<34	<36	<35	<435	NA	<560	NA	<557
Carbon Disulfide	<12	<12	<11	<12	<12	<435	NA	<560	NA	<557
Carbon Tetrachloride	<35	<37	<34	<36	<35	<149	NA	<192	NA	<191
Chlorobenzene	<12	10000	<11	<12	<12	1720	NA	19200	NA	6160
Chloroethane	<10	<11	<100	<110	<100	<435	NA	<560	NA	<557
Chloroform	<35	<37	<34	<36	<35	<149	NA	<192	NA	<191
Chloromethane	<23	<25	<23	<24	<23	<286	NA	<369	NA	<367
Dibromochloromethane	<58	<62	<57	<59	<58	<149	NA	<192	NA	<191
Dibromomethane	<58	<62	<57	<59	<58	<149	NA	<192	NA	<191
Dichlorodifluoromethane	<58	<62	<57	<59	<58	<286	NA	<369	NA	<367
Ethyl Methacrylate	<35	<37	<34	<36	<35	<149	NA	<192	NA	<191
Ethylbenzene	<12	<12	<11	NA	<12	<149	NA	<192	NA	<191
Freon 113	NA	NA	NA	NA	NA	<286	NA	959 J	NA	<367
Freon 141b	NA	NA	NA	NA	NA	<149	NA	<192	NA	<191
Hexachlorobutadiene	<58	<62	<57	<59	<58	<286	NA	<369	NA	<367
Isopropylbenzene	<12	<12	<11	<12	<12	<435	NA	<560	NA	<557
Methyl Iodide	<23	<25	<23	<24	<23	<435	NA	<560	NA	<557
Methylene Chloride	<23	57B	47B	41B	40B	<286	NA	<369	NA	<367

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB24-0305D	SM010-TB24-2123	SM010-TB25-0001	SM010-TB25-0305	SM010-TB25-1820	SM012-TB01-0001	SM012-TB01-0103	SM012-TB01-0305	SM012-TB01-0305	SM012-TB01-0709
SAMPLE DEPTH(ft)	3.00-5.00	21.00-23.00	0.00-1.00	3.00-5.00	18.00-20.00	0.00-1.00	1.00-3.00	3.00-5.00	3.00-5.00	7.00-9.00
SAMPLE LOCATION	TB24	TB24	TB25	TB25	TB25	TB01	TB01	TB01	TB01	TB01
SAMPLE DATE	11/16/1999	11/16/1999	11/12/1999	11/12/1999	11/12/1999	6/25/1997	11/12/1999	6/25/1997	11/12/1999	6/25/1997
PARAMETER										
Naphthalene	<12	<12	<11	<12	<12	<149	NA	<192	NA	<191
Styrene	<35	<37	<34	<36	<35	<149	NA	<192	NA	<191
Tetrachloroethene	<290	<31	<280	<300	<290	<149	NA	<192	NA	<191
Toluene	<23	<25	<23	<24	<23	252 J	NA	413 J	NA	<191
Trichloroethene	<47	<50	<46	<47	<47	<149	NA	<192	NA	<191
Trichlorofluoromethane	<58	<62	<57	<59	<58	<286	NA	<369	NA	<367
Vinyl Acetate	<280	<300	<270	<280	<280	<435	NA	<560	NA	<557
Vinyl Chloride	<35	<37	<34	<36	<35	<286	NA	<369	NA	<367
cis-1,2-Dichloroethene	<23	<25	<23	<35	<23	<286	NA	<369	NA	<367
cis-1,3-Dichloropropene	<23	<37	<34	<58	<35	<149	NA	<192	NA	<191
m+p-Xylene	<35	<37	<34	<36	<35	<149	NA	<192	NA	<191
n-Butylbenzene	<23	<25	<23	<24	<23	<149	NA	<192	NA	<191
n-Propylbenzene	<23	<25	<23	<24	<23	<149	NA	<192	NA	<191
o-Xylene	<35	<37	<34	<36	<35	<149	NA	<192	NA	<191
p-Isopropyltoluene	<23	<25	<23	<24	<23	275 J	NA	<192	NA	<191
sec-Butylbenzene	<12	<12	<11	<12	<12	<149	NA	<192	NA	<191
tert-Butylbenzene	<23	<25	<23	<24	<23	<149	NA	<192	NA	<191
trans-1,2-Dichloroethene	<35	<37	<34	<36	<35	<286	NA	<369	NA	<367
trans-1,3-Dichloropropene	<35	<37	<34	<36	<35	<149	NA	<192	NA	<191
trans-1,4-Dichloro-2-butene	<47	<50	<46	<47	<47	<1490	NA	<1920	NA	<1910
Semivolatiles ($\mu\text{g/kg}$)										
1,2,3-Trichlorobenzene	<120	<120	<110	<120	<120	R	<110	R	<110	R
1,2,4,5-Tetrachlorobenzene	<130	<140	<130	<130	<130	R	<120	R	<120	R
1,2,4-Trichlorobenzene	<120	<120	<110	<120	<120	R	<110	R	<110	R
1,2-Dichlorobenzene	<100	<110	<100	<110	<100	R	29000	R	28000	R
1,3-Dichlorobenzene	<93	<100	<91	<95	<930	R	<90	R	<88	R
1,4-Dichlorobenzene	<100	<110	<100	<110	<100	R	500	R	400	R
1-Chloronaphthalene	<100	<110	<100	<110	<100	R	<100	R	<99	R
1-Methylnaphthalene	<120	<120	<110	<120	<120	R	270	R	<110	R
1-Naphthylamine	<900	<96	<880	<900	<900	R	<870	R	<850	R
2,3,4,6-Tetrachlorophenol	<93	<100	<91	<95	<93	R	<90	R	<88	R
2,3-Dichloroaniline	<120	<120	<110	<120	<120	R	<110	R	<110	R
2,4,5-Trichlorophenol	<93	<100	<91	<95	<93	R	<90	R	<88	R
2,4,6-Trichlorophenol	<120	<120	<110	<120	<120	R	<110	R	<110	R
2,4-Dichlorophenol	<130	<140	<130	<130	<130	R	<120	R	<120	R
2,4-Dimethylphenol	<130	<140	<130	<130	<130	R	<120	R	<120	R
2,4-Dinitrophenol	<810	<870	<800	<830	<810	R	<790	R	<770	R
2,4-Dinitrotoluene	<100	110	<100	<110	<100	R	150	R	110	R
2,4-Toluenediamine	<3500	<3800	<3500	<360	<3500	R	<3400	R	<3400	R
2,6-Dichlorophenol	<130	<140	<130	<130	<130	R	<120	R	<120	R
2,6-Dinitrotoluene	<130	<140	<130	<130	<130	R	<120	R	<120	R
2-Chloronaphthalene	<130	<140	<130	<130	<130	R	<120	R	<120	R
2-Chlorophenol	<100	<110	<100	<110	<100	R	<100	R	<99	R
2-Methylnaphthalene	<120	<120	<110	<120	<120	R	270	R	<110	R
2-Naphthylamine	<720	<770	<710	<740	<720	R	<700	R	<680	R
2-Nitroaniline	<120	<100	<110	<120	<120	R	<110	R	<110	R
2-Nitrodiphenylamine	<93	<100	<91	<95	<93	R	<90	R	<88	R
2-Nitrophenol	<100	<110	<100	<110	<100	R	<100	R	<99	R
2-Picoline	<100	<110	<100	<110	<100	R	<100	R	<99	R
3,3'-Dichlorobenzidine	<280	<300	<270	<280	<280	R	<270	R	<260	R
3-Methylcholanthrene	<130	<140	<130	<130	<130	R	<120	R	<120	R
3-Nitroaniline	<70	<75	<68	<71	<70	R	<67	R	<66	R
4,4'-Methylenedianiline	<1500	<1600	<1400	<1500	<1500	R	<1400	R	<1400	R
4,6-Dinitro-o-cresol	<400	<420	<390	<400	<400	R	<380	R	<380	R

TABLE 4.5-1
Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM010-TB24-0305D	SM010-TB24-2123	SM010-TB25-0001	SM010-TB25-0305	SM010-TB25-1820	SM012-TB01-0001	SM012-TB01-0103	SM012-TB01-0303	SM012-TB01-0305	SM012-TB01-0709
SAMPLE DEPTH(ft)	3.00-5.00	21.00-23.00	0.00-1.00	3.00-5.00	18.00-20.00	0.00-1.00	1.00-3.00	3.00-5.00	3.00-5.00	7.00-9.00
SAMPLE LOCATION	TB24	TB24	TB25	TB25	TB25	TB01	TB01	TB01	TB01	TB01
SAMPLE DATE	11/16/1999	11/16/1999	11/12/1999	11/12/1999	11/12/1999	6/25/1997	11/12/1999	6/25/1997	11/12/1999	6/25/1997
PARAMETER										
4-Aminobiphenyl	<570	<610	<560	<580	<570	R	<550	R	<540	R
4-Aminodiphenylamine						R	R	R	R	R
4-Bromophenyl phenyl ether	<130	<140	<130	<130	<130	R	<120	R	<120	R
4-Chloro-m-cresol	<150	<160	<150	<150	<150	R	<150	R	<140	R
4-Chlorophenylphenyl ether	<120	<120	<110	<120	<120	R	<110	R	<110	R
4-Nitroaniline	<93	<100	<91	<95	<93	R	<90	R	<88	R
4-Nitrophenol	<360	<390	<350	<370	<360	R	<350	R	<340	R
5-Nitro-o-toluidine	<110	<110	<100	<110	<100	R	<100	R	<99	R
7,12-dimethylbenz[a]anthracene	<160	<170	<160	<170	<160	R	<160	R	<150	R
Acenaphthene	<130	<140	<130	<130	<130	R	<120	R	<120	R
Acenaphthylene	<130	<140	<130	<130	<130	R	<120	R	<120	R
Acetophenone	<100	<110	<100	<110	<100	R	<100	R	<99	R
Aniline	<510	<550	<500	<520	<510	R	2700	R	1100	R
Anthracene	<100	<110	<100	<110	<100	R	100	R	110	R
Azobenzene	<130	<140	<130	<130	<130	R	380	R	340	R
Benzidine	<1500	<1600	<1400	<1500	<1500	R	<1400	R	<1400	R
Benz(a)anthracene	<130	<140	<130	<130	<130	R	<120	R	<120	R
Benz(a)pyrene	<130	<140	<130	<140	<140	R	<120	R	<120	R
Benz(b)fluoranthene	<100	<110	<100	<110	<110	R	<100	R	<99	R
Benz(ghi)perylene	<210	<220	<210	<210	<210	R	<200	R	<200	R
Benz(k)fluoranthene	<140	<150	<140	<140	<140	R	<130	R	<130	R
Benzoic Acid	<1300	<1400	<1300	<130	<130	R	<120	R	<120	R
Benzyl Alcohol	<100	<110	<100	<110	<100	R	<100	R	<99	R
Benzyl butyl phthalate	<120	<120	<110	<120	<120	R	<100	R	<110	R
Bis(2-chloroethoxymethane)	<120	<120	<110	<120	<120	R	<110	R	<110	R
Bis(2-chloroethyl)ether	<100	<110	<100	<110	<100	R	<100	R	<99	R
Bis(2-chloroisopropyl)ether	<100	<110	<100	<110	<100	R	<100	R	<99	R
Bis(2-ethylhexyl) phthalate	<130	<140	<130	<130	<130	R	<120	R	<110	R
Bisphenol A	<170	<190	<170	<180	<170	R	13000	R	15000	R
Carbazole	<81	<87	<80	<83	<81	R	<79	R	<77	R
Chrysene	<130	<140	<130	<130	<130	R	<120	R	<120	R
Cyclohexanone	<58	<62	<57	<590	<580	R	<56	R	<55	R
Di-n-butyl phthalate	200UB	150UB	120UB	290UB	130UB	R	280UB	R	120UB	R
Di-n-octyl phthalate	<140	<150	<140	<140	<140	R	<130	R	<130	R
Dibenzo(a,h)anthracene	<150	<160	<150	<150	<150	R	<150	R	<140	R
Dibenzofuran	<100	<110	<100	<110	<100	R	<100	R	<99	R
Diethyl Phthalate	<100	<110	<100	<110	<100	R	170B	R	130B	R
Dimethylphthalate	<100	<110	<100	<110	<100	R	<100	R	<99	R
Ethyl Methane Sulfonate	<93	<100	<91	<95	<93	R	<90	R	<88	R
Fluoranthene	<120	<120	<110	<120	<120	R	<110	R	<110	R
Fluorene	<93	<140	<130	<130	<130	R	<120	R	<120	R
Heptachlor	<160	<160	<91	<95	<93	R	<90	R	<88	R
Hexachlorobenzene	<160	<170	<160	<170	<160	R	160	R	<150	R
Hexachlorobutadiene	<100	<110	<100	<110	<100	R	<100	R	<99	R
Hexachlorocyclopentadiene	<1600	<1700	<1500	<1600	<1600	R	<1500	R	<1500	R
Hexachloroethane	<100	<110	<100	<110	<100	R	<100	R	<99	R
Indeno(1,2,3-cd)pyrene	<160	<170	<160	<170	<160	R	<160	R	<150	R
Isophorone	<140	<150	<140	<140	<140	R	<130	R	<130	R
Methyl methane sulfonate	<120	<120	<110	<120	<120	R	<110	R	<110	R
N-Nitrosodibutylamine	<140	<150	<140	<140	<140	R	<130	R	<130	R
N-Nitrosodimethylamine	<100	<110	<100	<110	<100	R	<100	R	<99	R
N-Nitrosodiphenylamine	<330	<350	<320	<330	<330	R	<310	R	<31	R
N-Nitrosodipropylamine	<100	<110	<100	<110	<100	R	<100	R	<99	R
N-Nitrosopiperidine	<120	<120	<110	<120	<120	R	<110	R	<110	R
Naphthalene	<120	<120	<110	<120	<120	R	180	R	<110	R
Nitrobenzene	<100	<110	<100	<110	<100	R	880	R	350	R
Pentachlorobenzene	<130	<140	<130	<130	<130	R	<120	R	<120	R

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM010-TB24-0305D 3.00-5.00 TB24 11/16/1999	SM010-TB24-2123 21.00-23.00 TB24 11/16/1999	SM010-TB25-0001 0.00-1.00 TB25 11/12/1999	SM010-TB25-0305 3.00-5.00 TB25 11/12/1999	SM010-TB25-1820 18.00-20.00 TB25 11/12/1999	SM012-TB01-0001 0.00-1.00 TB01 6/25/1997	SM012-TB01-0103 1.00-3.00 TB01 11/12/1999	SM012-TB01-0305 3.00-5.00 TB01 6/25/1997	SM012-TB01-0305 3.00-5.00 TB01 11/12/1999	SM012-TB01-0709 7.00-9.00 TB01 6/25/1997
PARAMETER										
Pentachloronitrobenzene	<81	<87	<80	<83	<81	R	<79	R	<77	R
Pentachlorophenol	<290	<310	<280	<300	<290	R	<280	R	<280	R
Phenacetin	<100	<110	<100	<110	<100	R	<100	R	<99	R
Phenanthrene	<120	<120	<110	<120	<120	R	180	R	<110	R
Phenol	<120	<120	<110	<120	<120	R	120	R	120	R
Pyrene	<130	<140	<130	<130	<130	R	<120	R	<120	R
Pyridine	<100	<110	<100	<110	<100	R	<100	R	<99	R
Trimethylphosphate	<100	<110	<100	<110	<100	R	<100	R	<99	R
Triphenylphosphate	<150	<160	<150	<110	<150	R	<150	R	<140	R
m,p-Cresol	<210	<220	<210	<210	<150	R	<200	R	<200	R
m-Nitrotoluene	<120	<120	<110	<120	<120	R	<110	R	<110	R
m-Toluidine	<93	<100	<91	<95	<93	R	<90	R	<88	R
o,p-Toluidine	<81	<87	<80	<83	<81	R	850	R	490	R
o-Cresol	<93	<100	<91	<95	<93	R	<90	R	<88	R
o-Nitrotoluene	<130	<140	<130	<130	<130	R	160	R	<120	R
p-Chloroaniline	<93	<100	<91	<95	<93	R	1600	R	1300	R
p-Dimethylaminoazobenzene	<150	<160	<150	<150	<150	R	<150	R	<140	R
p-Nitrotoluene	<100	<140	<100	<110	<100	R	440	R	220	R
Metals (µg/kg)										
Antimony	<2330	<2490	<2280	<2370	<2330	<458	NA	<529	NA	<527
Cadmium	<581	<623	<570	<593	<582	1723	NA	11924	NA	2109
Chromium	4930	4100	3390	3830	2620	69497	NA	531219	NA	92827
Lead	14100	12700	15200	15300	12100	4689	NA	23690	NA	14433
Nickel	5470	5360	5600	11600	5130	468754	NA	491520	NA	61155
Miscellaneous (µg/kg)										
Percent Moisture	14.0%	19.8%	12.3%	15.7%	14.1%	12.6%	11.0%	32.2%	9.4%	31.8%
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BTU from ECD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ignitability (Flash Point) for S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Percent Ash	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH in Water (Solid Sample)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

NA=Not analyzed

B=Blanks contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, additional information

U=Nondetect at reported limit

<=Nondetect at reported limit

BLE 4.5-1
tical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

PARAMETER	SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM012-TB01-0709 7.00-9.00 TB01 11/12/1999	SM012-TB01-1113 11.00-13.00 TB01 6/25/1997	SM012-TB01-1317 13.00-17.00 TB01 6/25/1997	SM012-TB02-0001 0.00-1.00 TB02 6/25/1997	SM012-TB02-0305 3.00-5.00 TB02 6/25/1997	M012-TB02-091 9.00-13.00 TB02 6/25/1997	SM012-TB03-0001 0.00-1.00 TB03 6/25/1997	SM012-TB03-0305 3.00-5.00 TB03 6/25/1997	SM012-TB03-1113 11.00-13.00 TB03 6/25/1997	SM012-TB03-151 15.00-17.00 TB03 6/25/1997
Volatiles (µg/kg)											
1,1,1,2-Tetrachloroethane	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130	
1,1,1-Trichloroethane	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
1,1,2,2-Tetrachloroethane	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
1,1,2-Trichloroethane	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130	
1,1-Dichloroethane	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
1,1-Dichloroethylene	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130	
1,1-Dichloropropene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
1,2,3-Trichlorobenzene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
1,2,3-Trichloropropane	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
1,2,4-Trichlorobenzene	NA	< 196	< 8900	< 140	1590 J	< 9450	< 143	< 153	< 30300	< 3070	
1,2,4-Trimethylbenzene	NA	< 196	< 8900	< 140	< 1450	< 9450	241 J	< 153	< 30300	< 3070	
1,2-Dibromo-3-chloropropane	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130	
1,2-Dibromoethane	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
1,2-Dichlorobenzene	NA	1060000	6760000 J	1830	1140000	17200000	< 274	< 294	2550000	196000	
1,2-Dichloroethane	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130	
1,2-Dichloropropane	NA	< 574	< 26700	< 408	< 4350	< 28400	< 417	< 448	< 91000	< 9200	
1,3,5-Trimethylbenzene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
1,3-Dichlorobenzene	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130	
1,3-Dichloropropane	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
1,4-Dichlorobenzene	NA	10300	114000	< 269	13200	176000	< 274	< 294	69200 J	< 6130	
2,2-Dichloropropane	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
2-Butanone (MEK)	NA	< 1330	< 62300	< 946	< 10100	< 66200	< 965	< 1040	< 218000	< 22100	
2-Chloroethyl Vinyl Ether	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130	
2-Chlorotoluene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
2-Hexanone	NA	< 574	< 26700	< 408	< 4350	< 28400	< 417	< 448	< 91000	< 9200	
4-Chlorotoluene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
4-Methyl-2-pentanone (MIK)	NA	< 574	< 26700	< 408	< 4350	< 28400	< 417	< 448	< 91000	< 9200	
Acetone	NA	< 1330	< 62300	< 946	< 10100	< 66200	< 965	< 1040	< 218000	< 22100	
Acrolein	NA	< 3780	< 178000	< 2690	< 29000	< 189000	< 2740	< 2940	< 607000	< 61300	
Acrylonitrile	NA	< 1960	< 89000	< 1400	< 14500	< 94500	< 1430	< 1530	< 303000	< 30700	
Allyl Chloride	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
Benzene	NA	24200	12600000 J	< 140	217000	1340000	< 143	< 153	2310000	69900	
Bromobenzene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
Bromochloromethane	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
Bromodichloromethane	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130	
Bromoform	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
Bromomethane	NA	< 574	< 26700	< 408	< 4350	< 28400	< 417	< 448	< 91000	< 9200	
Carbon Disulfide	NA	< 574	< 26700	< 408	< 4350	< 28400	< 417	< 448	< 91000	< 9200	
Carbon Tetrachloride	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
Chlorobenzene	NA	49800	10500000 J	344 J	1100000	2460000	< 143	648 J	27900000	1470000	
Chloroethane	NA	< 574	< 26700	< 408	< 4350	< 28400	< 417	< 448	< 91000	< 9200	
Chloroform	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
Chloromethane	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130	
Dibromochloromethane	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
Dichlorodifluoromethane	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130	
Ethyl Methacrylate	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
Ethylbenzene	NA	< 196	11900 J	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
Freon 113	NA	< 378	< 17800	527 J	< 2900	100000	< 274	< 294	< 60700	< 6130	
Freon 141b	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070	
Hexachlorobutadiene	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130	
Isopropylbenzene	NA	< 574	< 26700	< 408	< 4350	< 28400	< 417	< 448	< 91000	< 9200	
Methyl Iodide	NA	< 574	< 26700	< 408	< 4350	< 28400	< 417	< 448	< 91000	< 9200	
Methylene Chloride	NA	6190	1370000	< 269	5800 J	643000	< 274	< 294	< 60700	< 6130	

TABLE 4.S-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM012-TB01-0709	SM012-TB01-1113	SM012-TB01-1317	SM012-TB02-0001	SM012-TB02-0305	M012-TB02-091	SM012-TB03-0001	SM012-TB03-0305	SM012-TB03-1113	SM012-TB03-151
SAMPLE DEPTH(ft)	7.00-9.00	11.00-13.00	13.00-17.00	0.00-1.00	3.00-5.00	9.00-13.00	0.00-1.00	3.00-5.00	11.00-13.00	15.00-17.00
SAMPLE LOCATION	TB01	TB01	TB01	TB02	TB02	TB02	TB03	TB03	TB03	TB03
SAMPLE DATE	11/12/1999	6/25/1997	6/25/1997	6/25/1997	6/25/1997	6/25/1997	6/25/1997	6/25/1997	6/25/1997	6/25/1997
PARAMETER										
Naphthalene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070
Styrene	NA	< 196	< 8900	< 140	15900	< 9450	< 143	< 153	< 30300	< 3070
Tetrachloroethene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070
Toluene	NA	27200	7120000 J	< 140	71000	1740000	< 143	< 153	449000	13500 J
Trichloroethene	NA	< 196	< 8900	< 140	13500	< 9450	< 143	< 153	< 30300	< 3070
Trichlorofluoromethane	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130
Vinyl Acetate	NA	< 574	< 26700	< 408	< 4350	< 28400	< 417	< 448	< 91000	< 9200
Vinyl Chloride	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130
cis-1,2-Dichloroethene	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130
cis-1,3-Dichloropropene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070
m+p-Xylene	NA	< 196	33800 J	< 140	< 1450	< 9450	< 143	< 153	58300 J	< 3070
n-Butylbenzene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070
n-Propylbenzene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070
o-Xylene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070
p-Isopropyltoluene	NA	317 J	32000 J	< 140	3040 J	< 9450	< 143	< 153	133000 J	6990 J
sec-Butylbenzene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070
tert-Butylbenzene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070
trans-1,2-Dichloroethene	NA	< 378	< 17800	< 269	< 2900	< 18900	< 274	< 294	< 60700	< 6130
trans-1,3-Dichloropropene	NA	< 196	< 8900	< 140	< 1450	< 9450	< 143	< 153	< 30300	< 3070
trans-1,4-Dichloro-2-butene	NA	< 1960	< 89000	< 1400	< 14500	< 94500	< 1430	< 1530	< 303000	< 30700
Semivolatiles (ug/kg)										
1,2,3-Trichlorobenzene	<41000	< 3630	< 85400	< 2580	< 17400	R	< 2630	< 2830	< 5830	< 5890
1,2,4,5-Tetrachlorobenzene	<45000	< 3630	< 85400	< 2580	< 17400	R	< 2630	< 2830	< 5830	< 5890
1,2,4-Trichlorobenzene	<41000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
1,2-Dichlorobenzene	8700000	3350000	3770000	33800	5220000	R	< 2190	< 2360	75700	136000
1,3-Dichlorobenzene	<32000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
1,4-Dichlorobenzene	130000	< 3020	< 71200	< 2150	38300	R	< 2190	< 2360	< 4850	< 4910
1-Chloronaphthalene	<36000	< 7550	< 178000	< 5370	< 36200	R	< 5480	< 5890	< 12100	< 12300
1-Methylnaphthalene	<41000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
1-Naphthylamine	<310000	< 10300	< 242000	< 7310	< 49300	R	< 7460	< 8010	< 16500	< 16700
2,3,4,6-Tetrachlorophenol	<32000	< 6040	< 142000	< 4300	< 29000	R	< 4390	< 4710	< 9710	< 9820
2,3-Dichloroaniline	<41000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
2,4,5-Trichlorophenol	<32000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
2,4,6-Trichlorophenol	<41000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
2,4-Dichlorophenol	<45000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
2,4-Dimethylphenol	<45000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
2,4-Dinitrophenol	<280000	< 18700	< 441000	< 13300	< 89900	R	< 13600	< 14600	< 30100	< 30400
2,4-Dinitrotoluene	230000	8610	< 71200	< 2150	< 14500	R	< 2190	< 2360	350000	317000
2,4-Toluenediamine	2100000JJ	< 15100	< 356000	< 10800	< 72500	R	< 11000	< 11800	< 24300	< 24500
2,6-Dichlorophenol	<45000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
2,6-Dinitrotoluene	130000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	93700	76100
2-Chloronaphthalene	<45000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
2-Chlorophenol	<36000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
2-Methylnaphthalene	<41000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
2-Naphthylamine	<250000	< 11500	< 270000	< 8170	< 55100	R	< 8340	< 8950	< 18500	< 18700
2-Nitroaniline	<41000	< 3630	< 85400	< 2580	< 17400	R	< 2630	< 2830	< 5830	< 5890
2-Nitrodiphenylamine	<32000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
2-Nitrophenol	<36000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
2-Picoline	<36000	< 11200	< 263000	< 7950	< 53600	R	< 8120	< 8720	< 18000	< 18200
3,3'-Dichlorobenzidine	<97000	< 18400	< 434000	< 13100	< 88400	R	< 13400	< 14400	< 29600	< 29900
3-Methylicholanthrene	<45000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
3-Nitroaniline	<24000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910
4,4' Methyleneedianiline	<510000	< 26600	< 626000	< 18900	< 128000	R	< 19300	< 20700	< 42700	< 43200
4,6-Dinitro-o-cresol	<140000	< 3020	< 71200	< 2150	< 14500	R	< 2190	< 2360	< 4850	< 4910

TABLE 4.5-1
Statistical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM012-TB01-0709 7.00-9.00 TB01 11/12/1999	SM012-TB01-1113 11.00-13.00 TB01 6/25/1997	SM012-TB01-1317 13.00-17.00 TB01 6/25/1997	SM012-TB02-0001 0.00-1.00 TB02 6/25/1997	SM012-TB02-0305 3.00-5.00 TB02 6/25/1997	M012-TB02-091 9.00-13.00 TB02 6/25/1997	SM012-TB03-0001 0.00-1.00 TB03 6/25/1997	SM012-TB03-0305 3.00-5.00 TB03 6/25/1997	SM012-TB03-1113 11.00-13.00 TB03 6/25/1997	SM012-TB03-151 15.00-17.00 TB03 6/25/1997
PARAMETER										
4-Aminobiphenyl	<200000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
4-Aminodiphenylamine		<7550	<178000	<5370	<36200	R	<5480	<5890	<12100	<12300
4-Bromophenyl phenyl ether	<45000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
4-Chloro-m-cresol	<53000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
4-Chlorophenylphenyl ether	<41000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
4-Nitroaniline	<32000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
4-Nitrophenoxy	<130000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
5-Nitro-o-toluidine	47000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	14000
7,12-dimethylbenz[a]anthracene	<57000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Acenaphthene	<45000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Acenaphthylene	<45000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Acetophenone	<36000	<3930	<92500	<2790	<18800	R	<2850	<3060	<6310	<6380
Aniline	2200000	45000	2260000	<3010	1080000	R	<3070	<3300	<6800	16200
Anthracene	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Azobenzene	<45000	<3630	<85400	<2580	<17400	R	<2630	<2830	<5830	<5890
Benzidine	<510000	<48300	<1140000	<34400	<232000	R	<35100	<37700	<77700	<78500
Benz{o(a)}anthracene	<45000	<3930	<92500	<2790	<18800	R	<2850	<3060	<6310	<6380
Benz{o(b)}pyrene	<45000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Benz{o(b)}fluoranthene	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Benz{o(ghi)}perylene	<73000	<3320	<78300	<2360	<15900	R	<2410	<2590	<5340	<5400
Benz{o(k)}fluoranthene	<49000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Benzoic Acid	<450000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Benzyl Alcohol	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Benzyl butyl phthalate	<41000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Bis(2-chloroethoxymethane)	<41000	<3020	<71200	<2150	<14500	R	<2190	<2360	5580	<4910
Bis(2-chloroethyl)ether	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Bis(2-chloroisopropyl)ether	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Bis(2-ethylhexyl) phthalate	<45000	<3630	<85400	<2580	<17400	R	<2630	<2830	<5830	<5890
Bisphenol A	1000000	78000	523000	4640 B	1970000	R	7830	38400	193000	227000
Carbazole	<28000	<15100	<356000	<10800	<72500	R	<11000	<11800	<24300	<24500
Chrysene	<45000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Cyclohexanone	<20000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Di-n-butyl phthalate	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Di-n-octyl phthalate	<49000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Dibenzo(a,h)anthracene	<53000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Dibenzofuran	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Diethyl Phthalate	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Dimethylphthalate	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Ethyl Methane Sulfonate	<32000	<5440	<128000	<3870	<26100	R	<3950	<4240	<8740	<8830
Fluoranthene	<41000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Fluorene	<45000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Heptachlor	<32000	<3320	<78300	<2360	<15900	R	<2410	<2590	<5340	<5400
Hexachlorobenzene	<57000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Hexachlorobutadiene	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Hexachlorocyclopentadiene	<550000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Hexachloroethane	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Indeno[1,2,3-cd]pyrene	<57000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Isophorone	<49000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Methyl methane sulfonate	<41000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
N-Nitrosodibutylamine	<49000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
N-Nitrosodimethylamine	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
N-Nitrosodiphenylamine	<110000	<3930	<92500	<2790	<18800	R	<2850	<3060	<6310	<6380
N-Nitrosodipropylamine	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
N-Nitrosopiperidine	<41000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Naphthalene	<41000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Nitrobenzene	1300000	486000	8040000	2170	<14500	R	<2190	<2360	485000	584000
Pentachlorobenzene	<45000	<5140	<121000	<3650	<24600	R	<3730	<4000	<8250	<8340

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM012-TB01-0709	SM012-TB01-1113	SM012-TB01-1317	SM012-TB02-0001	SM012-TB02-0305	M012-TB02-091	SM012-TB03-0001	SM012-TB03-0305	SM012-TB03-1113	SM012-TB03-151
SAMPLE DEPTH(ft)	7.00-9.00	11.00-13.00	13.00-17.00	0.00-1.00	3.00-5.00	9.00-13.00	0.00-1.00	3.00-5.00	11.00-13.00	15.00-17.00
SAMPLE LOCATION	TB01	TB01	TB01	TB02	TB02	TB02	TB03	TB03	TB03	TB03
SAMPLE DATE	11/12/1999	6/25/1997	6/25/1997	6/25/1997	6/25/1997	6/25/1997	6/25/1997	6/25/1997	6/25/1997	6/25/1997
Pentachloronitrobenzene	<28000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Pentachlorophenol	<100000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Phenacetin	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Phenanthrene	<41000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Phenol	<41000	<1810	<42700	<1290	37100	R	<1320	<1410	<2910	<2940
Pyrene	<45000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Pyridine	<36000	<3320	<78300	<2360	<15900	R	<2410	<2590	<5340	<5400
Trimethylphosphate	<36000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
Triphenylphosphate	<53000	<15100	<356000	<10800	<72500	R	<11000	<11800	<24300	<24500
m,p-Cresol	<73000	<4530	<107000	<3220	<21700	R	<3290	<3530	<7280	<7360
m-Nitrotoluene	<41000	<3020	<71200	<2150	<14500	R	<2190	<2360	11600	12800
m-Toluidine	<32000	<6040	<142000	<4300	46400	R	<4390	<4710	<9710	<9820
o,p-Toluidine	210000	<15400	<363000	<11000	341000	R	<11200	<12000	<24800	<25000
o-Cresol	<32000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
o-Nitrotoluene	260000	4410	733000	<2150	33900	R	<2190	<2360	141000	135000
p-Chloroaniline	490000	<3020	<71200	<2150	48700	R	<2190	<2360	<4850	10100
p-Dimethylaminoazobenzene	<53000	<3020	<71200	<2150	<14500	R	<2190	<2360	<4850	<4910
p-Nitrotoluene	210000	<4530	525000	<3220	24500	R	<3290	<3530	114000	122000
Metals (µg/kg)										
Antimony	NA	<535	<575	<430	<524	<588	<435	<471	<485	<491
Cadmium	NA	4402	3034	1979	7100	5516	<435	967	717	1114
Chromium	NA	208313	144145	159321	1274604	2126625	10177	10232	11972	14801
Lead	NA	13890	147096	9184	28296	32825	23700	14364	13872	20045
Nickel	NA	94864	18602399	360168	7127317	8058285	54529	17841	26930	47519
Miscellaneous (µg/kg)										
Percent Moisture	38.3%	33.8%	43.8%	6.97%	31.0%	47.1%	8.84%	15.1%	17.6%	18.5%
Total Organic Carbon	NA	NA	NA	750000 J	NA	2000000 J	NA	NA	NA	NA
BTU from ECD	NA	NA	NA	< 500 BTU	NA	< 500 BTU	NA	NA	NA	NA
Ignitability (Flash Point) for S	NA	NA	NA	Negative	NA	Negative	NA	NA	NA	NA
Percent Ash	NA	NA	NA	101 %	NA	25 %	NA	NA	NA	NA
pH in Water (Solid Sample)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, additional information

U=Nondetect at reported limit

<=Nondetect at reported limit

HLE 4.5-1
Statistical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM015-TB01-0001	SM015-TB01-0305	SM015-TB01-0305FD	SM015-TB01-0709	SM015-TB01-1820	SM015-TB02-0001	SM015-TB02-0305	SM015-TB02-1315	SM015-TB02-1921	SM015-TB03-0001
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	3.00-5.00	7.00-9.00	18.00-20.00	0.00-1.00	3.00-5.00	13.00-15.00	19.00-21.00	0.00-1.00
SAMPLE LOCATION	TB01	TB01	TB01	TB01	TB01	TB02	TB02	TB02	TB02	TB03
SAMPLE DATE	6/30/1997	6/30/1997	6/30/1997	6/30/1997	6/30/1997	6/30/1997	6/30/1997	6/30/1997	6/30/1997	6/27/1997
PARAMETER										
Volatiles (µg/kg)										
1,1,1,2-Tetrachloroethane	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
1,1,1-Trichloroethane	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
1,1,2,2-Tetrachloroethane	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
1,1,2-Trichloroethane	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
1,1-Dichloroethane	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
1,1-Dichloroethene	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
1,1-Dichloropropene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
1,2,3-Trichlorobenzene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
1,2,3-Trichloropropane	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
1,2,4-Trichlorobenzene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
1,2,4-Trimethylbenzene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
1,2-Dibromo-3-chloropropane	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
1,2-Dibromoethane	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
1,2-Dichlorobenzene	< 287	< 299	< 299	< 291	32300	< 271	< 313	15100	5950	295 J
1,2-Dichloroethane	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
1,2-Dichloropropane	< 436	< 455	< 455	< 443	< 454	< 412	< 476	< 478	< 462	< 431
1,3,5-Trimethylbenzene	< 149	< 156	< 156	< 152	< 155	477 J	< 163	< 164	< 158	< 148
1,3-Dichlorobenzene	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
1,3-Dichloropropane	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
1,4-Dichlorobenzene	< 287	< 299	< 299	< 291	3350	< 271	< 313	1510	413 J	< 284
2,2-Dichloropropane	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
2-Butanone (MEK)	< 1010	< 1050	< 1050	< 1030	< 1050	< 953	< 1100	< 1110	< 1070	< 999
2-Chloroethyl Vinyl Ether	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
2-Chlorotoluene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
2-Hexanone	< 436	< 455	< 455	< 443	< 454	< 412	< 476	< 478	< 462	< 431
4-Chlorotoluene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
4-Methyl-2-pentanone (MIK)	< 436	< 455	< 455	< 443	< 454	< 412	< 476	< 478	< 462	< 431
Acetone	< 1010	< 1050	< 1050	< 1030	< 1050	< 953	< 1100	< 1110	< 1070	< 999
Acrolein	< 2870	< 2990	< 2990	< 2910	< 2990	< 2710	< 3130	< 3140	< 3040	< 2840
Acrylonitrile	< 1490	< 1560	< 1560	< 1520	< 1550	< 1410	< 1630	< 1640	< 1580	< 1480
Allyl Chloride	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Benzene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148 J
Bromobenzene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Bromochloromethane	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Bromodichloromethane	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
Bromoform	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Bromomethane	< 436	< 455	< 455	< 443	< 454	< 412	< 476	< 478	< 462	< 431
Carbon Disulfide	< 436	< 455	< 455	< 443	< 454	< 412	< 476	< 478	< 462	< 431
Carbon Tetrachloride	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Chlorobenzene	321 J	< 156	< 156	198 J	2750	< 141	< 163	3020	1020	148 J
Chloroethane	< 436	< 455	< 455	< 443	< 454	< 412	< 476	< 478	< 462	< 431
Chloroform	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Chloromethane	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
Dibromochloromethane	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Dibromomethane	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Dichlorodifluoromethane	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
Ethyl Methacrylate	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Ethylbenzene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Freon 113	< 287	910 J	743 J	618 J	777 JB	401 J	514 JB	1070 JB	1820 B	443 J
Freon 141b	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Hexachlorobutadiene	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
Isopropylbenzene	< 436	< 455	< 455	< 443	< 454	< 412	< 476	< 478	< 462	< 431
Methyl Iodide	< 436	< 455	< 455	< 443	< 454	< 412	< 476	< 478	< 462	< 431
Methylene Chloride	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM015-TB01-0001 0.00-1.00 TB01 6/30/1997	SM015-TB01-0305 3.00-5.00 TB01 6/30/1997	SM015-TB01-0305FD 3.00-5.00 TB01 6/30/1997	SM015-TB01-0709 7.00-9.00 TB01 6/30/1997	SM015-TB01-1820 18.00-20.00 TB01 6/30/1997	SM015-TB02-0001 0.00-1.00 TB02 6/30/1997	SM015-TB02-0305 3.00-5.00 TB02 6/30/1997	SM015-TB02-1315 13.00-15.00 TB02 6/30/1997	SM015-TB02-1921 19.00-21.00 TB02 6/30/1997	SM015-TB03-0001 0.00-1.00 TB03 6/27/1997
PARAMETER										
Naphthalene	172 J	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Styrene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Tetrachloroethene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Toluene	264 J	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148 J
Trichloroethene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
Trichlorofluoromethane	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
Vinyl Acetate	< 436	< 455	< 455	< 443	< 454	< 412	< 476	< 478	< 462	< 431
Vinyl Chloride	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
cis-1,2-Dichloroethene	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
cis-1,3-Dichloropropene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
m+p-Xylene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
n-Butylbenzene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
n-Propylbenzene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
o-Xylene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
p-Isopropyltoluene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	214 J	< 158	< 148 J
sec-Butylbenzene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
tert-Butylbenzene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
trans-1,2-Dichloroethene	< 287	< 299	< 299	< 291	< 299	< 271	< 313	< 314	< 304	< 284
trans-1,3-Dichloropropene	< 149	< 156	< 156	< 152	< 155	< 141	< 163	< 164	< 158	< 148
trans-1,4-Dichloro-2-butene	< 1490	< 1560	< 1560	< 1520	< 1550	< 1410	< 1630	< 1640	< 1580	< 1480
Semivolatiles (µg/kg)										
1,2,3-Trichlorobenzene	< 280 J	< 290	< 290	< 280	< 290	< 2600	< 300 J	< 300	< 290 J	< 540
1,2,4,5-Tetrachlorobenzene	< 280 J	< 290	< 290	< 280	< 290	< 2600	< 300 J	< 300	< 290 J	< 540
1,2,4,5-Trichlorobenzene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
1,2-Dichlorobenzene	370 J	< 240	< 240	670	20300	< 2170	< 230 J	4330	7170 J	1490
1,3-Dichlorobenzene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
1,4-Dichlorobenzene	300 J	< 240	< 240	< 230	2130	< 2170	< 250 J	550	< 240 J	< 450
1-Chloronaphthalene	< 570 J	< 600	< 600	< 580	< 600	< 5410	< 630 J	< 630	< 610 J	< 1140
1-Methylnaphthalene	230 J	< 240	< 240	250	< 240	10200	< 250 J	1160	< 240 J	600
1-Naphthylamine	< 780 J	< 810	< 810	< 790	< 810	< 7360	< 850 J	< 860	< 830 J	< 1540
2,3,4,6-Tetrachlorophenol	< 460 J	< 480	< 480	< 470	< 480	< 4330	< 500 J	< 500	< 490 J	< 910
2,3-Dichloroaniline	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
2,4,5-Trichlorophenol	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
2,4,6-Trichlorophenol	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
2,4-Dichlorophenol	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
2,4-Dimethylphenol	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
2,4-Dinitrophenol	< 1420 J	< 1490	< 1490	< 1450	< 1480	< 13400	< 1550 J	< 1560	< 1510 J	< 2810
2,4-Dinitrotoluene	< 230 J	< 240	< 240	< 230	< 240	4980	< 250 J	< 250	< 240 J	520
2,4-Toluenediamine	< 1150 J	< 1200	< 1200	< 1170	< 1190	< 10800	< 1250 J	< 1260	< 1220 J	< 2270
2,6-Dichlorophenol	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
2,6-Dinitrotoluene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	2270
2-Chloronaphthalene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
2-Chlorophenol	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
2-Methylnaphthalene	330 J	< 240	< 240	400	< 240	< 2170	< 250 J	1430	< 240 J	830
2-Naphthylamine	< 870 J	< 910	< 910	< 890	< 910	< 8230	< 950 J	< 960	< 920 J	< 1730
2-Nitroaniline	< 280 J	< 290	< 290	< 280	< 290	< 2600	< 300 J	< 300	< 290 J	< 540
2-Nitrodiphenylamine	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
2-Nitrophenol	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
2-Picoline	< 850 J	< 890	< 890	< 860	< 880	< 8010	< 930 J	< 930	< 900 J	< 1680
3,3'-Dichlorobenzidine	< 1400 J	< 1460	< 1460	< 1420	< 1460	< 13200	< 1530 J	< 1530	< 1480 J	< 2770
3-Methylcholanthrene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
3-Nitroaniline	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
4,4' Methyleneedianiline	< 2020 J	< 2110	< 2110	< 2050	< 2100	< 19100	< 2210 J	< 2210	< 2140 J	< 4000
4,6-Dinitro-o-cresol	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450

ILE 4.5-1
tical Results for
SWMU Group D: SWMUS 10, 12, 15 and 16

SAMPLE ID	SM015-TB01-0001	SM015-TB01-0305	SM015-TB01-0305FD	SM015-TB01-0709	SM015-TB01-1820	SM015-TB02-0001	SM015-TB02-0305	SM015-TB02-1315	SM015-TB02-1921	SM015-TB03-0001
SAMPLE LOCATION	0.00-1.00 TB01 6/30/1997	3.00-5.00 TB01 6/30/1997	3.00-5.00 TB01 6/30/1997	7.00-9.00 TB01 6/30/1997	18.00-20.00 TB01 6/30/1997	0.00-1.00 TB02 6/30/1997	3.00-5.00 TB02 6/30/1997	13.00-15.00 TB02 6/30/1997	19.00-21.00 TB02 6/30/1997	0.00-1.00 TB03 6/27/1997
PARAMETER										
4-Aminobiphenyl	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
4-Aminodiphenylamine	< 570 J	< 600	< 600	< 580	< 600	< 5410	< 630 J	< 630	< 610 J	< 1140
4-Bromophenyl phenyl ether	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
4-Chloro-m-cresol	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
4-Chlorophenylphenyl ether	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
4-Nitroaniline	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
4-Nitrophenol	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
5-Nitro-o-toluidine	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
7,12-dimethylbenz[a]anthracene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Acenaphthene	< 230 J	< 240	< 240	< 230	< 240	4310	< 250 J	< 250	< 240 J	< 450
Acenaphthylene	< 230 J	< 240	< 240	< 230	< 240	3680	< 250 J	< 250	< 240 J	< 450
Acetophenone	< 300 J	< 310	< 310	< 300	< 310	< 2820	< 330 J	< 330	< 320 J	< 590
Aniline	< 320 J	< 340	< 340	< 330	< 330	< 3030	< 350 J	< 350	< 340 J	< 640
Anthracene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Azobenzene	< 280 J	< 290	< 290	< 280	< 290	< 2600	< 300 J	< 300	< 290 J	< 540
Benzidine	< 3670 J	< 3830	< 3830	< 3730	< 3820	< 34700	< 4010 J	< 4030	< 3890 J	< 7260
Benzo(a)anthracene	< 300 J	< 310	< 310	< 300	< 310	< 2820	< 330 J	< 330	< 320 J	< 590
Benzo(s)pyrene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Benzo(b)fluoranthene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Benzo(ghi)perylene	< 250 J	< 260	< 260	< 260	< 260	< 2380	< 280 J	< 280	< 270 J	< 500
Benzo(k)fluoranthene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Benzoic Acid	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Benzyl Alcohol	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Benzyl butyl phthalate	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Bis(2-chloroethoxymethane)	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Bis(2-chloroethyl)ether	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Bis(2-chloroisopropyl)ether	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Bis(2-ethylhexyl) phthalate	380 J	< 290	< 290	280	300	< 2600	< 300 J	310	430 J	< 540
Bisphenol A	1190 J	< 430	< 430	< 420	< 430	< 3900	< 450 J	3900	510 J	8220 B
Carbazole	< 1150 J	< 1200	< 1200	< 1170	< 1190	< 10800	< 1250 J	< 1260	< 1220 J	< 2270
Chrysene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Cyclohexanone	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Di-n-butyl phthalate	2120 J	630 J	1690 J	1590 J	630 J	< 2170 J	850 J	3950 J	1970 J	1670 JB
Di-n-octyl phthalate	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Dibenzo(a,h)anthracene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Dibenzofuran	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Diethyl Phthalate	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Dimethylphthalate	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Ethyl Methane Sulfonate	2110 J	< 430	< 430	< 420	< 430	< 3900	< 450 J	< 450	< 440 J	< 820
Fluoranthene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Fluorene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Heptachlor	< 250 J	< 260	< 260	< 260	< 260	< 2380	< 280 J	< 280	< 270 J	< 500
Hexachlorobenzene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Hexachlorobutadiene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Hexachlorocyclopentadiene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Hexachloroethane	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Indeno(1,2,3-cd)pyrene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Isophorone	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Methyl methane sulfonate	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
N-Nitrosodibutylamine	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
N-Nitrosodimethylamine	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
N-Nitrosodiphenylamine	< 300 J	< 310	< 310	< 300	< 310	< 2820	< 330 J	< 330	< 320 J	< 590
N-Nitrosodipropylamine	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
N-Nitrosopiperidine	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Naphthalene	< 230 J	< 240	< 240	250	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Nitrobenzene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	270	< 240 J	< 450
Pentachlorobenzene	< 390 J	< 410	< 410	< 400	< 410	< 3680	< 430 J	< 430	< 410 J	< 770

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM015-TB01-0001	SM015-TB01-0305	SM015-TB01-0305FD	SM015-TB01-0709	SM015-TB01-1820	SM015-TB02-0001	SM015-TB02-0305	SM015-TB02-1315	SM015-TB02-1921	SM015-TB03-0001
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	3.00-5.00	7.00-9.00	18.00-20.00	0.00-1.00	3.00-5.00	13.00-15.00	19.00-21.00	0.00-1.00
SAMPLE LOCATION	TB01	TB01	TB01	TB01	TB01	TB02	TB02	TB02	TB02	TB03
SAMPLE DATE	6/30/1997	6/30/1997	6/30/1997	6/30/1997	6/30/1997	6/30/1997	6/30/1997	6/30/1997	6/30/1997	6/27/1997
PARAMETER										
Pentachloronitrobenzene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Pentachlorophenol	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Phenacetin	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Phenanthrene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	510	< 240 J	< 450
Phenol	< 140 J	< 140	< 140	< 140	< 140	< 1300	< 150 J	< 150	< 150 J	450
Pyrene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Pyridine	< 250 J	< 260	< 260	< 260	< 260	< 2380	< 280 J	< 280	< 270 J	< 500
Trimethylphosphate	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
Triphenylphosphate	< 1150 J	< 1200	< 1170	< 1190	< 10800	< 1250 J	< 1260	< 1220 J	< 2270	
m,p-Cresol	< 340 J	< 360	< 360	< 350	< 360	< 3250	< 380 J	< 380	< 360 J	< 680
m-Nitrotoluene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
m-Toluidine	< 460 J	< 480	< 480	< 470	< 480	< 4330	< 500 J	< 500	< 490 J	< 910
o,p-Toluidine	< 1170 J	< 1220	< 1220	< 1190	< 1220	< 11100	< 1280 J	< 1280	< 1240 J	< 2320
o-Cresol	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
o-Nitrotoluene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
p-Chloroaniline	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
p-Dimethylaminouazobenzene	< 230 J	< 240	< 240	< 230	< 240	< 2170	< 250 J	< 250	< 240 J	< 450
p-Nitrotoluene	< 340 J	< 360	< 360	< 350	< 360	< 3250	< 380 J	< 380	< 360 J	< 680
Metals (µg/kg)										
Antimony	<452	<466	<466	<457	<465	<431	<481	<482	<471	<448
Cadmium	511	2671	890	858	1205	711	1090	693	658	2508
Chromium	13209	22601	18407	19757	20353	14749	25362	13737	16360	20366
Lead	12534	42985	20837	21968	18229	14725	23327	7912	14153	39218
Nickel	23145	707854	52309	26152	25470	24977	22718	18557	27424	359199
Miscellaneous (µg/kg)										
Percent Moisture	12.9%	16.5%	16.5%	14.2%	16.3%	7.66%	20.2%	20.5%	17.7%	11.9%
Total Organic Carbon	NA	NA	NA	NA	NA	6600000	3400000	4800000	NA	NA
BTU from ECD	NA	NA	NA	NA	NA	< 500 BTU	< 500 BTU	NA	< 500 BTU	NA
Ignitability (Flash Point) for S	NA	NA	NA	NA	NA	957 %	2280 %	NA	2300 %	NA
Percent Ash	NA	NA	NA	NA	NA	NA	7.4 std	7.7 std	NA	NA
pH in Water (Solid Sample)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, additional information

U=Nondetect at reported limit

<=Nondetect at reported limit

TABLE 4.5-1
Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM015-TB03-0305	SM015-TB03-0709	SM015-TB03-1012	SM015-TB03-1316	SM015-TB03-1719	SM015-TB04-0001	SM015-TB04-0305
SAMPLE DEPTH(ft)	3.00-5.00	7.00-9.00	10.00-12.00	13.00-16.00	17.00-19.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB03	TB03	TB03	TB03	TB03	TB04	TB04
SAMPLE DATE	6/27/1997	6/27/1997	6/27/1997	6/27/1997	6/27/1997	6/27/1997	6/27/1997
PARAMETER							
Volatiles (µg/kg)							
1,1,1,2-Tetrachloroethane	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318
1,1,1-Trichloroethane	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
1,1,2,2-Tetrachloroethane	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
1,1,2-Trichloroethane	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318
1,1-Dichloroethane	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
1,1-Dichloroethene	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318
1,1-Dichloropropene	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
1,2,3-Trichlorobenzene	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
1,2,3-Trichloropropane	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
1,2,4-Trichlorobenzene	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
1,2,4-Trimethylbenzene	6380	< 158	< 3210	< 1790	< 3600	< 302	< 166
1,2-Dibromo-3-chloropropane	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318
1,2-Dibromoethane	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
1,2-Dichlorobenzene	3610	1820	962000 J	302000 J	3020000 J	181000 J	5100 J
1,2-Dichloroethane	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318
1,2-Dichloropropane	< 457	< 462	< 9620	< 5220	< 10800	< 907	< 484
1,3,5-Trimethylbenzene	2770	< 158	< 3210	< 1790	< 3600	< 302	< 166
1,3-Dichlorobenzene	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318
1,3-Dichloropropane	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
1,4-Dichlorobenzene	1320	583 J	128000	39800	374000	21800	< 318
2,2-Dichloropropane	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
2-Butanone (MEK)	< 1060	< 1070	< 23100	< 12100	< 25900	< 2180	< 1120
2-Chloroethyl Vinyl Ether	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318
2-Chlorotoluene	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
2-Hexanone	< 457	< 462	< 9620	< 5220	< 10800	< 907	< 484
4-Chlorotoluene	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
4-Methyl-2-pentanone (MVK)	< 457	< 462	< 9620	< 5220	< 10800	< 907	< 484
Acetone	< 1060	< 1070	< 23100	< 12100	< 25900	< 2180	< 1120
Acrolein	< 3010	< 3040	< 64100	< 34300	< 71900	< 6050	< 3180
Acrylonitrile	< 1560	< 1580	< 32100	< 17900	< 36000	< 3020	< 1660
Allyl Chloride	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
Benzene	265 J	< 158	< 3210 J	< 1790 J	< 3600 J	2900 J	1020 J
Bromobenzene	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
Bromochloromethane	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
Bromodichloromethane	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318
Bromoform	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
Bromomethane	< 457	< 462	< 9620	< 5220	< 10800	< 907	< 484
Carbon Disulfide	< 457	< 462	< 9620	< 5220	< 10800	< 907	< 484
Carbon Tetrachloride	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
Chlorobenzene	60200	13400	3970000 J	1040000 J	4320000 J	181000 J	10200 J
Chloroethane	< 457	< 462	< 9620	< 5220	< 10800	< 907	< 484
Chloroform	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
Chloromethane	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318
Dibromochloromethane	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
Dibromomethane	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
Dichlorodifluoromethane	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318
Ethyl Methacrylate	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
Ethylbenzene	1680	328 J	< 3210	< 1790	< 3600	< 302	< 166
Freon 113	890 JB	644 J	397000 B	5910 J	< 7190	1110 J	637 J
Freon 141b	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166
Hexachlorobutadiene	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318
Isopropylbenzene	566 J	< 462	< 9620	< 5220	< 10800	< 907	< 484
Methyl Iodide	< 457	< 462	< 9620	< 5220	< 10800	< 907	< 484
Methylene Chloride	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

PARAMETER	SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM015-TB03-0305 3.00-5.00 TB03 6/27/1997	SM015-TB03-0709 7.00-9.00 TB03 6/27/1997	SM015-TB03-1012 10.00-12.00 TB03 6/27/1997	SM015-TB03-1316 13.00-16.00 TB03 6/27/1997	SM015-TB03-1719 17.00-19.00 TB03 6/27/1997	SM015-TB04-0001 0.00-1.00 TB04 6/27/1997	SM015-TB04-0305 3.00-5.00 TB04 6/27/1997
Naphthalene	2650	< 158	< 3210	< 1790	< 3600	< 302	< 166	
Styrene	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166	
Tetrachloroethene	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166	
Toluene	< 156	< 158	< 3210 J	< 1790 J	< 3600 J	< 302 J	< 166 J	
Trichloroethene	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166	
Trichlorofluoromethane	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318	
Vinyl Acetate	< 457	< 462	< 9620	< 5220	< 10800	< 907	< 484	
Vinyl Chloride	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318	
cis-1,2-Dichloroethene	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318	
cis-1,3-Dichloropropene	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166	
m+p-Xylene	927	996	< 3210	< 1790	< 3600	< 302	< 166	
n-Butylbenzene	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166	
n-Propylbenzene	903	< 158	< 3210	< 1790	< 3600	< 302	< 166	
o-Xylene	722 J	279 J	< 3210	< 1790	< 3600	< 302	< 166	
p-Isopropyltoluene	2290	2070	603000 J	13700 J	360000 J	18100 J	4710 J	
sec-Butylbenzene	1020	< 158	< 3210	< 1790	< 3600	< 302	< 166	
tert-Butylbenzene	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166	
trans-1,2-Dichloroethene	< 301	< 304	< 6410	< 3430	< 7190	< 605	< 318	
trans-1,3-Dichloropropene	< 156	< 158	< 3210	< 1790	< 3600	< 302	< 166	
trans-1,4-Dichloro-2-butene	< 1560	< 1580	< 32100	< 17900	< 36000	< 3020	< 1660	
Semivolatiles (μg/kg)								
1,2,3-Trichlorobenzene	< 2890	< 2920	< 3080	< 33000	< 3450	< 2900	< 610 J	
1,2,4,5-Tetrachlorobenzene	< 2890	< 2920	< 3080	< 33000	< 3450	< 2900	< 610 J	
1,2,4-Trichlorobenzene	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
1,2-Dichlorobenzene	6520	26000	296000	1580000	< 2880	21000	6060 J	
1,3-Dichlorobenzene	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
1,4-Dichlorobenzene	< 2410	3110	45600	< 27500	104000	< 2420	< 510 J	
1-Chloronaphthalene	< 6020	< 6080	< 6410	< 68700	< 7190	< 6050	< 1270 J	
1-Methylnaphthalene	< 2410	5150	< 2560	< 27500	< 2880	< 2420	< 510 J	
1-Naphthylamine	< 8180	< 8260	< 8720	< 93400	< 9780	< 8220	< 1730 J	
2,3,4,6-Tetrachlorophenol	< 4810	< 4860	< 5130	< 55000	< 5760	< 4840	< 1020 J	
2,3-Dichloroaniline	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
2,4,5-Trichlorophenol	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
2,4,6-Trichlorophenol	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
2,4-Dichlorophenol	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
2,4-Dimethylphenol	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
2,4-Dinitrophenol	< 14900	< 15100	< 15900	< 170000	< 17800	< 15000	< 3160 J	
2,4-Dinitrotoluene	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
2,4-Toluenediamine	R	< 12200	< 12800	< 137000	< 14400	< 12100	< 2550 J	
2,6-Dichlorophenol	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
2,6-Dinitrotoluene	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
2-Chloronaphthalene	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
2-Chlorophenol	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
2-Methylnaphthalene	< 2410	3620	< 2560	< 27500	< 2880	< 2420	< 510 J	
2-Naphthylamine	< 9150	< 9230	< 9740	< 104000	< 10900	< 9190	< 1940 J	
2-Nitroaniline	< 2890	< 2920	< 3080	< 33000	< 3450	< 2900	< 610 J	
2-Nitrodiphenylamine	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
2-Nitrophenol	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
2-Picoline	< 8900	< 8990	< 9490	< 102000	< 10700	< 8950	< 1890 J	
3,3'-Dichlorobenzidine	< 14700	< 14800	< 15600	< 168000	< 17600	< 14800	< 3110 J	
3-Methylcholanthrene	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
3-Nitroaniline	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	
4,4' Methyleneedianiline	112000	< 21400	144000	1020000	R	89200	18700 J	
4,6-Dinitro-o-cresol	< 2410	< 2430	< 2560	< 27500	< 2880	< 2420	< 510 J	

HLE 4.5-1
tical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM015-TB03-0305	SM015-TB03-0709	SM015-TB03-1012	SM015-TB03-1316	SM015-TB03-1719	SM015-TB04-0001	SM015-TB04-0305
SAMPLE DEPTH(ft)	3.00-5.00	7.00-9.00	10.00-12.00	13.00-16.00	17.00-19.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB03	TB03	TB03	TB03	TB03	TB04	TB04
SAMPLE DATE	6/27/1997	6/27/1997	6/27/1997	6/27/1997	6/27/1997	6/27/1997	6/27/1997
PARAMETER							
4-Aminobiphenyl	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
4-Aminodiphenylamine	R	<6080	<6410	<68700	<7190	<6050	<1270 J
4-Bromophenyl phenyl ether	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
4-Chloro-m-cresol	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
4-Chlorophenylphenyl ether	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
4-Nitroaniline	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
4-Nitrophenol	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
5-Nitro-o-toluidine	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
7,12-dimethylbenz[a]anthracene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Acenaphthene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Acenaphthylene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Acetophenone	<3130	<3160	<3330	<35700	<3740	<3140	<660 J
Aniline	8930	3520 B	236000	180000	112000	11400 B	17100 J
Anthracene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Azobenzene	<2890	<2920	<3080	<33000	<3450	<2900	<610 J
Benzidine	<38500	<38900	<41000	<440000	<46000	<38700	<8150 J
Benzo(a)anthracene	<3130	<3160	<3330	<35700	<3740	<3140	<660 J
Benzo(a)pyrene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Benzo(b)fluoranthene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Benzo(ghi)perylene	<2650	<2670	<2820	<30200	<3170	<2660	<560 J
Benzo(k)fluoranthene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Benzoic Acid	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Benzyl Alcohol	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Benzyl butyl phthalate	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Bis(2-chloroethoxy)methane)	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Bis(2-chloroethyl)ether	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Bis(2-chloroisopropyl)ether	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Bis(2-ethylhexyl) phthalate	<2890	<2920	<3080	<33000	<3450	<2900	<610 J
Bisphenol A	277000	39100 B	26700 B	<49500	<5180	21200 B	53000 J
Carbazole	<12000	<12200	<12800	<137000	<14400	<12100	<2550 J
Chrysene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Cyclohexanone	<2410	<2430	<2560	<27500	<2880	<2420	540 J
Di-n-butyl phthalate	<2410 J	4280 JB	2900 JB	<27500 J	<2880 J	2540 JB	1110 J
Di-n-octyl phthalate	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Dibenzo(a,h)anthracene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Dibenzofuran	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Diethyl Phthalate	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Dimethylphthalate	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Ethyl Methane Sulfonate	<4330	<4370	<4620	<49500	<5180	<4350	<920 J
Fluoranthene	<2410	5910	<2560	<27500	<2880	<2420	<510 J
Fluorene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Heptachlor	<2650	<2670	<2820	<30200	<3170	<2660	<560 J
Hexachlorobenzene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Hexachlorobutadiene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Hexachlorocyclopentadiene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Hexachloroethane	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Indeno(1,2,3-cd)pyrene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Isophorone	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Methyl methane sulfonate	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
N-Nitrosodibutylamine	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
N-Nitrosodimethylamine	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
N-Nitrosodiphenylamine	<3130	<3160	<3330	<35700	<3740	<3140	<660 J
N-Nitrosodipropylamine	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
N-Nitrosopiperidine	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Naphthalene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Nitrobenzene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Pentachlorobenzene	<4090	<4130	<4360	<46700	<4890	<4110	<870 J

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM015-TB03-0305 3.00-5.00 TB03 6/27/1997	SM015-TB03-0709 7.00-9.00 TB03 6/27/1997	SM015-TB03-1012 10.00-12.00 TB03 6/27/1997	SM015-TB03-1316 13.00-16.00 TB03 6/27/1997	SM015-TB03-1719 17.00-19.00 TB03 6/27/1997	SM015-TB04-0001 0.00-1.00 TB04 6/27/1997	SM015-TB04-0305 3.00-5.00 TB04 6/27/1997
PARAMETER							
Pentachloronitrobenzene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Pentachlorophenol	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Phenacetin	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Phenanthrene	<2410	8820	<2560	<27500	<2880	<2420	<510 J
Phenol	<1440	<1460	<1540	<16500	9240	<1450	<310 J
Pyrene	<2410	4470	<2560	<27500	<2880	<2420	<510 J
Pyridine	<2650	<2670	<2820	<30200	<3170	<2660	<560 J
Trimethylphosphate	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
Triphenylphosphate	<12000	<12200	<12800	<137000	<14400	<12100	<2550 J
m,p-Cresol	<3610	<3650	<3850	<41200	<4320	<3630	<760 J
m-Nitrotoluene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
m-Toluidine	<4810	<4860	<5130	<55000	<5760	<4840	<1020 J
o,p-Toluidine	<12300	<12400	<13100	<140000	<14700	<12300	<2600 J
o-Cresol	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
o-Nitrotoluene	<2410	<2430	<2560	<27500	<2880	<2420	<510 J
p-Chloroaniline	<2410	3500	<2560	<27500	<2880	<2420	<510 J
p-Dimethylaminoazobenzene	3750	<2430	<2560	<27500	<2880	<2420	<510 J
p-Nitrotoluene	<3610	<3650	<3850	<41200	<4320	<3630	<760 J
Metals (µg/kg)							
Antimony	<468	<471	<488	<509	<522	<469	<486
Cadmium	2201	1328	967	824	711	1161	1172
Chromium	19172	18950	20984	24295	43718	17478	16646
Lead	27785	26092	10945	5636	19724	29408	33221
Nickel	318669	197148	802882	1771769	290363	409377	308610
Miscellaneous (µg/kg)							
Percent Moisture	16.9%	17.7%	22.0%	27.2%	30.5%	17.3%	21.5%
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA
BTU from ECD	NA	NA	NA	NA	NA	NA	NA
Ignitability (Flash Point) for S	NA	NA	NA	NA	NA	NA	NA
Percent Ash	NA	NA	NA	NA	NA	NA	NA
pH in Water (Solid Sample)	NA	NA	NA	NA	NA	NA	NA

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, additional informa

U=Nondetect at reported limit

<=Nondetect at reported limit

TABLE 4.5-1
Analitical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM015-TB04-0508	SM015-TB04-1719	SM016-TB01-0001	SM016-TB01-0305	SM016-TB01-0709	SM016-TB01-1517	SM016-TB01-1820
SAMPLE DEPTH(ft)	5.00-8.00	17.00-19.00	0.00-1.00	3.00-5.00	7.00-9.00	15.00-17.00	18.00-20.00
SAMPLE LOCATION	TB04	TB04	TB01	TB01	TB01	TB01	TB01
SAMPLE DATE	6/27/1997	6/27/1997	7/1/1997	7/1/1997	7/1/1997	7/1/1997	7/1/1997
PARAMETER							
Volatiles (µg/kg)							
1,1,1,2-Tetrachloroethane	< 250	< 300	< 278	< 320	< 300	< 302	< 296
1,1,1-Trichloroethane	< 130	< 156	< 145	< 166	< 156	< 157	< 154
1,1,2,2-Tetrachloroethane	< 130	< 156	< 145	< 166	< 156	< 157	< 154
1,1,2-Trichloroethane	< 250	< 300	< 278	< 320	< 300	< 302	< 296
1,1-Dichloroethane	< 130	< 156	< 145	< 166	< 156	< 157	< 154
1,1-Dichloroethene	< 250	< 300	< 278	< 320	< 300	< 302	< 296
1,1-Dichloropropene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
1,2,3-Trichlorobenzene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
1,2,3-Trichloropropane	< 130	< 156	< 145	< 166	< 156	< 157	< 154
1,2,4-Trichlorobenzene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
1,2,4-Trimethylbenzene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
1,2-Dibromo-3-chloropropane	< 250	< 300	< 278	< 320	< 300	< 302	< 296
1,2-Dibromoethane	< 130	< 156	< 145	< 166	< 156	< 157	< 154
1,2-Dichlorobenzene	1200	60100 J	< 278	< 320	< 300	< 302	3310
1,2-Dichloroethane	< 250	< 300	< 278	< 320	< 300	< 302	< 296
1,2-Dichloropropane	< 380	< 457	< 423	< 487	< 456	< 459	< 449
1,3,5-Trimethylbenzene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
1,3-Dichlorobenzene	< 250	< 300	< 278	< 320	< 300	< 302	< 296
1,3-Dichloropropane	< 130	< 156	< 145	< 166	< 156	< 157	< 154
1,4-Dichlorobenzene	940	7450	< 278	< 320	< 300	< 302	< 296
2,2-Dichloropropane	< 130	< 156	< 145	< 166	< 156	< 157	< 154
2-Butanone (MEK)	< 880	< 1060	< 979	< 1130	< 1060	< 1060	< 1040
2-Chloroethyl Vinyl Ether	< 250	< 300	< 278	< 320	< 300	< 302	< 296
2-Chlorotoluene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
2-Hexanone	< 380	< 457	< 423	< 487	< 456	< 459	< 449
4-Chlorotoluene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
4-Methyl-2-pentanone (MIK)	< 380	< 457	< 423	< 487	< 456	< 459	< 449
Acetone	< 880	< 1060	< 979	< 1130	< 1060	< 1060	< 1040
Acrolein	< 2500	< 3000	< 2780	< 3200	< 3000	< 3020	< 2960
Acrylonitrile	< 1300	< 1560	< 1450	< 1660	< 1560	< 1570	< 1540
Allyl Chloride	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Benzene	< 130	< 156 J	< 145	< 166	< 156	< 157	7680
Bromobenzene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Bromochloromethane	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Bromodichloromethane	< 250	< 300	< 278	< 320	< 300	< 302	< 296
Bromoform	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Bromomethane	< 380	< 457	< 423	< 487	< 456	< 459	< 449
Carbon Disulfide	< 380	< 457	< 423	< 487	< 456	< 459	< 449
Carbon Tetrachloride	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Chlorobenzene	12000	49300 J	< 145	166 J	168 J	< 157	757
Chloroethane	< 380	< 457	< 423	< 487	< 456	< 459	< 449
Chloroform	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Chloromethane	< 250	< 300	< 278	< 320	< 300	< 302	< 296
Dibromochloromethane	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Dibromomethane	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Dichlorodifluoromethane	< 250	< 300	< 278	< 320	< 300	< 302	< 296
Ethyl Methacrylate	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Ethylbenzene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Freon 113	670 J	< 300	1050 J	1920	984 J	519 J	< 296
Freon 141b	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Hexachlorobutadiene	< 250	< 300	< 278	< 320	< 300	< 302	< 296
Isopropylbenzene	< 380	< 457	< 423	< 487	< 456	< 459	< 449
Methyl Iodide	< 380	< 457	< 423	< 487	< 456	< 459	< 449
Methylene Chloride	< 250	< 300	< 278	< 320	< 300	< 302	< 296

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM015-TB04-0508 5.00-8.00 TB04 6/27/1997	SM015-TB04-1719 17.00-19.00 TB04 6/27/1997	SM016-TB01-0001 0.00-1.00 TB01 7/1/1997	SM016-TB01-0305 3.00-5.00 TB01 7/1/1997	SM016-TB01-0709 7.00-9.00 TB01 7/1/1997	SM016-TB01-1517 15.00-17.00 TB01 7/1/1997	SM016-TB01-1820 18.00-20.00 TB01 7/1/1997
PARAMETER							
Naphthalene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Styrene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Tetrachloroethene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Toluene	< 130	< 156 J	< 145	< 166	< 156	< 157	697 J
Trichloroethene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
Trichlorofluoromethane	< 250	< 300	< 278	< 320	< 300	< 302	< 296
Vinyl Acetate	< 380	< 457	< 423	< 487	< 456	< 459	< 449
Vinyl Chloride	< 250	< 300	< 278	< 320	< 300	< 302	< 296
cis-1,2-Dichloroethene	< 250	< 300	< 278	< 320	< 300	< 302	< 296
cis-1,3-Dichloropropene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
m+p-Xylene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
n-Butylbenzene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
n-Propylbenzene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
o-Xylene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
p-Isopropyltoluene	240 J	349 J	< 145	< 166	< 156	< 157	< 154
sec-Butylbenzene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
tert-Butylbenzene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
trans-1,2-Dichloroethene	< 250	< 300	< 278	< 320	< 300	< 302	< 296
trans-1,3-Dichloropropene	< 130	< 156	< 145	< 166	< 156	< 157	< 154
trans-1,4-Dichloro-2-butene	< 1300	< 1560	< 1450	< 1660	< 1560	< 1570	< 1540
Semivolatiles (µg/kg)							
1,2,3-Trichlorobenzene	NA	< 290	< 270	< 310 J	< 290	< 580 J	< 1420
1,2,4,5-Tetrachlorobenzene	NA	< 290	< 270	< 310 J	< 290	< 580 J	< 1420
1,2,4-Trichlorobenzene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
1,2-Dichlorobenzene	NA	< 240	830	< 260 J	280	2080 J	14900
1,3-Dichlorobenzene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
1,4-Dichlorobenzene	NA	3320	< 220	< 260 J	< 240	< 480 J	8480
1-Chloronaphthalene	NA	< 600	< 560	< 640 J	< 600	< 1210 J	< 2960
1-Methylnaphthalene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
1-Naphthylamine	NA	< 820	< 760	< 870 J	< 820	< 1640 J	< 4020
2,3,4,6-Tetrachlorophenol	NA	< 480	< 440	< 510 J	< 480	< 970 J	< 2360
2,3-Dichloroaniline	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
2,4,5-Trichlorophenol	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
2,4,6-Trichlorophenol	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
2,4-Dichlorophenol	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
2,4-Dimethylphenol	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
2,4-Dinitrophenol	NA	< 1490	< 1380	< 1590 J	< 1490	< 3000 J	< 7330
2,4-Dinitrotoluene	NA	< 240	600	< 260 J	< 240	41600 J	22000
2,4-Toluenediamine	NA	< 1200	< 1110	< 1280 J	R	R	< 5910
2,6-Dichlorophenol	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
2,6-Dinitrotoluene	NA	< 240	< 220	< 260 J	< 240	10500 J	7790
2-Chloronaphthalene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
2-Chlorophenol	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
2-Methylnaphthalene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
2-Naphthylamine	NA	< 910	< 850	< 970 J	< 910	< 1840 J	< 4490
2-Nitroaniline	NA	< 290	< 270	< 310 J	< 290	< 580 J	< 1420
2-Nitrodiphenylamine	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
2-Nitrophenol	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
2-Picoline	NA	< 890	< 820	< 950 J	< 890	< 1790 J	< 4370
3,3'-Dichlorobenzidine	NA	< 1470	< 1360	< 1560 J	< 1460	< 2950 J	< 7210
3-Methylcholanthrene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
3-Nitroaniline	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
4,4' Methyleneedianiline	NA	< 2120	< 1960	< 2250 J	< 2110	< 4250 J	R
4,6-Dinitro-o-cresol	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180

BLE 4.5-1
Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM015-TB04-0508	SM015-TB04-1719	SM016-TB01-0001	SM016-TB01-0305	SM016-TB01-0709	SM016-TB01-1517	SM016-TB01-1820
SAMPLE DEPTH(0)	5.00-8.00	17.00-19.00	0.00-1.00	3.00-5.00	7.00-9.00	15.00-17.00	18.00-20.00
SAMPLE LOCATION	TB04	TB04	TB01	TB01	TB01	TB01	TB01
SAMPLE DATE	6/27/1997	6/27/1997	7/1/1997	7/1/1997	7/1/1997	7/1/1997	7/1/1997
PARAMETER							
4-Aminobiphenyl	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
4-Aminodiphenylamine	NA	< 600	< 560	< 640 J	R	< 1210 J	< 2960
4-Bromophenyl phenyl ether	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
4-Chloro-m-cresol	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
4-Chlorophenylphenyl ether	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
4-Nitroaniline	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
4-Nitrophenol	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
5-Nitro-o-toluidine	NA	< 240	< 220	< 260 J	< 240	3190 J	3700
7,12-dimethylbenz[a]anthracene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Acenaphthene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Acenaphthylene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Acetophenone	NA	< 310	< 290	< 330 J	< 310	< 630 J	< 1540
Aniline	NA	< 340	< 310	< 360 J	< 340	< 680 J	< 1650
Anthracene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Azobenzene	NA	< 290	< 270	< 310 J	< 290	< 580 J	< 1420
Benzidine	NA	< 3850	< 3560	< 4100 J	< 3840	< 7730 J	< 18900
Benzo(a)anthracene	NA	< 310	< 290	< 330 J	< 310	< 630 J	< 1540
Benzo(a)pyrene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Benzo(b)fluoranthene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Benzo(ghi)perylene	NA	< 260	< 240	< 280 J	< 260	< 530 J	< 1300
Benzo(k)fluoranthene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Benzoic Acid	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Benzyl Alcohol	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Benzyl butyl phthalate	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Bis(2-chloroethoxymethane)	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Bis(2-chloroethyl)ether	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Bis(2-chloroisopropyl)ether	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Bis(2-ethylhexyl) phthalate	NA	310 B	< 270	320 JB	< 290	< 580 J	< 1420
Bisphenol A	NA	< 430	1060	340 JB	980	< 870 J	< 2130
Carbazole	NA	< 1200	< 1110	< 1280 J	< 1200	< 2420 J	< 5910
Chrysene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Cyclohexanone	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Di-n-butyl phthalate	NA	4210 JB	920 B	680 JB	390 B	940 JB	1340 B
Di-n-octyl phthalate	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Dibenz(a,h)anthracene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Dibenzofuran	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Diethyl Phthalate	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Dimethylphthalate	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Ethyl Methane Sulfonate	NA	< 430	< 400	< 460 J	< 430	< 870 J	< 2130
Fluoranthene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Fluorene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Heptachlor	NA	< 260	< 240	< 280 J	< 260	< 530 J	< 1300
Hexachlorobenzene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Hexachlorobutadiene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Hexachlorocyclopentadiene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Hexachloroethane	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Indeno(1,2,3-cd)pyrene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Isophorone	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Methyl methane sulfonate	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
N-Nitrosodibutylamine	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
N-Nitrosodimethylamine	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
N-Nitrosodiphenylamine	NA	< 310	< 290	< 330 J	< 310	< 630 J	< 1540
N-Nitrosodipropylamine	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
N-Nitrosopiperidine	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Naphthalene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Nitrobenzene	NA	< 240	< 220	< 260 J	< 240	13700 J	93000
Pentachlorobenzene	NA	< 410	< 380	< 440 J	< 410	< 820 J	< 2010

TABLE 4.5-1
Soil Analytical Results for
SWMU Group D: SWMUs 10, 12, 15 and 16

SAMPLE ID	SM015-TB04-0508	SM015-TB04-1719	SM016-TB01-0001	SM016-TB01-0305	SM016-TB01-0709	SM016-TB01-1517	SM016-TB01-1820
SAMPLE DEPTH(ft)	5.00-8.00	17.00-19.00	0.00-1.00	3.00-5.00	7.00-9.00	15.00-17.00	18.00-20.00
SAMPLE LOCATION	TB04	TB04	TB01	TB01	TB01	TB01	TB01
SAMPLE DATE	6/27/1997	6/27/1997	7/1/1997	7/1/1997	7/1/1997	7/1/1997	7/1/1997
PARAMETER							
Pentachloronitrobenzene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Pentachlorophenol	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Phenacetin	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Phenanthrene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Phenol	NA	< 140	< 130	< 150 J	< 140	< 290 J	< 710
Pyrene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Pyridine	NA	< 260	< 240	< 280 J	< 260	< 530 J	< 1300
Trimethylphosphate	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
Triphenylphosphate	NA	< 1200	< 1110	< 1280 J	< 1200	< 2420 J	< 5910
m,p-Cresol	NA	< 360	< 330	< 380 J	< 360	< 720 J	< 1770
m-Nitrotoluene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
m-Toluidine	NA	< 480	< 440	< 510 J	< 480	< 970 J	< 2360
o,p-Toluidine	NA	< 1230	< 1130	< 1310 J	< 1220	< 2460 J	< 6030
o-Cresol	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
o-Nitrotoluene	NA	< 240	< 220	< 260 J	< 240	3930 J	11900
p-Chloroaniline	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
p-Dimethylaminoazobenzene	NA	< 240	< 220	< 260 J	< 240	< 480 J	< 1180
p-Nitrotoluene	NA	< 360	< 330	< 380 J	< 360	5560 J	10200
Metals ($\mu\text{g/kg}$)							
Antimony	NA	<467	<440	<488	<467	<469	<462
Cadmium	NA	586	620	812	689	980	<462
Chromium	NA	21141	15965	17188	17272	16525	8955
Lead	NA	10975	13505	18159	15962	14649	8970
Nickel	NA	49173	27778	20077	21963	19924	12417
Miscellaneous ($\mu\text{g/kg}$)							
Percent Moisture	NA	16.8%	10.1%	21.9%	16.7%	17.2%	15.4%
Total Organic Carbon	NA	NA	3200000	5900000	NA	3900000	NA
BTU from ECD	NA	NA	7.4 std	NA	NA	NA	NA
Ignitability (Flash Point) for S	NA						
Percent Ash	NA						
pH in Water (Solid Sample)	NA						

Notes:

NA=Not analyzed

B=Blank contamination

J=Estimated concentration

K=Estimated concentration (high)

R=Rejected data, additional information

U=Nondetect at reported limit

<=Nondetect at reported limit

LE 4.5-2
Summary of Field Observations
SWMU Group D: SWMU 10, 12, 15, and 16

Boring Number	SM010-								
	TB01	TB02	TB03	TB04	TB05	TB06	TB07	TB08	TB09
Concrete/Asphalt (ft-bgs) ⁽¹⁾				0-0.5	0-0.5				
Gravel (ft-bgs)	0-0.5	0-0.5	0-0.5	0.5-2.5	0.5-2	0-1	0-1.5	0-5	0-3
Sand (ft-bgs)	0.5-6	0.5-13	0.5-21	2.5-11.5 / 17-21			19.5-21	5-21	9-16
Silty Sand (ft-bgs)				11.5-13 / 14.5-17					
Silt/Clay (ft-bgs)	6-7.5 / 19.5-21	13-21		13-14.5	2-21	1-13	1.5-19.5		3-9 / 16-21
TDI Residue (ft-bgs)	7.5-19.5								
Perched Groundwater (ft-bgs)		7	10.9		10.4	9	9	9	
Groundwater (ft-bgs)	13.9	19.7	NR ⁽²⁾	17.1	19.1		19	17	17.2
Total Depth (ft-bgs)	21	21	21	21	21	13	21	21	21
OVM ⁽³⁾ Readings (ppm ⁽⁴⁾ @ ft-bgs)	10 @ 2-3 12 @ 7-9 5.6 @ 11.9-13.9 2.2 @ 15-17 40.6 @ 19-21		8.9 @ 15-1 13.8 @ 7-9	0.6 @ 3-5			50 @ 1-3 167 @ 3-5 173 @ 7-9 761 @ 11-13 217 @ 15-17 >1999 @ 19-21		23 @ 7-9 826 @ 11-13 8.2 @ 15-17 322 @ 19-20
Additional Observations	Overlaps with SWMU 5	Overlaps with SWMUs 5 and 6	Overlaps with SWMUs 5 and 6			Overlaps with SWMU 13	Highest OVM reading is below groundwater		Overlaps with SWMU 13

NOTES:

⁽¹⁾ ft-bgs = Feet Below Ground Surface

⁽²⁾ NR = No Recovery

⁽³⁾ OVM = Organic Vapor Monitor

⁽⁴⁾ ppm = Parts per Million

TABLE 4.5-2
Summary of Field Observations
SWMU Group D: SWMU 10, 12, 15, and 16

Boring Number	SM010-							
	TB10	TB11	TB12	TB13	TB14	TB15	TB16	TB17
Concrete/Asphalt (ft-bgs) ⁽¹⁾	0-0.5	0-0.5	0-0.5					0-0.5
Gravel (ft-bgs)	0.5-3	0.5-5	0.5-3	0-2	0-1	0-7.5	0-6.5	0.5-2.5
Sand (ft-bgs)	5-21	5-9 / 12.5-13 / 17-25		11.5-18	1-8 / 13-16.5 / 18-21	7.5-8 / 11-11.5 / 12.5-21	18-21	2.5-8
Silty Sand (ft-bgs)		9-12.5						8-9
Silt/Clay (ft-bgs)	3-5	13-17	3-8 / 8-10	2-11.5	8-13 / 16.5-18	8-11 / 11.5-12.5	6.5-8	9-19
TDI Residue (ft-bgs)		10-10.5						
Perched Groundwater (ft-bgs)		8.2				8 / 11		13
Groundwater (ft-bgs)	20.1	20.1		18.3	18.3	17	20.7	19.4
Total Depth (ft-bgs)	21	25	10.5 (refusal)	21	21	21	21.5	21
OVM ⁽³⁾ Readings (ppm ⁽⁴⁾ @ ft-bgs)	258 @ 3-5 18.2 @ 7-9 6.8 @ 15-17 12 @ 20-21	11.4 @ 6-8 6.4 @ 15-17 256 @ 17-19 76 @ 25-25	29 @ 3-5 2.1 @ 7-9 >1999 @ 10		6.8 @ 3-5	11.9 @ 7.5-8	69.1 @ 20.5- 21.5	
Additional Observations	Overlaps with SWMU 13		Highest OVM reading @ concrete			OVM reading @ perched groundwater interval	OVM reading below groundwater	

NOTES:

⁽¹⁾ ft-bgs = Feet Below Ground Surface

⁽²⁾ NR = No Recovery

⁽³⁾ OVM = Organic Vapor Monitor

⁽⁴⁾ ppm = Parts per Million

LE 4.5-2

Summary of Field Observations
SWMU Group D: SWMU 10, 12, 15, and 16

Boring Number	SM010-							
	TB18	TB19	TB20	TB21	TB22	TB23	TB24	TB25
Concrete/Asphalt (ft-bgs) ⁽¹⁾	0-0.5						0-0.5	0-0.5
Gravel (ft-bgs)	0.5-2	0-0.5	0-1	0-5	0-0.5	0-0.5/11-12	0.5-1.5	0.5-1
Sand (ft-bgs)		0.2 / 9-21	1-9	5-11 / 18-21		0.5-9.5	23-24	16-20
Silty Sand (ft-bgs)	13-19		17-21	17.5-21	0.5-5.5	9.5-11		1-4
Silt/Clay (ft-bgs)	2-13 / 19-21	2-9	9-17	11-18			1.5-23	4-16
TDI Residue (ft-bgs)			16.5 (oil?)		5.5-12			
Perched Groundwater (ft-bgs)	10.4		16.8		10.9	11		
Groundwater (ft-bgs)	17	20.2	20	20	not reached	not reached	23.2	19.7
Total Depth (ft-bgs)	21	21	21	21	12	12	24	20
OVM ⁽³⁾ Readings (ppm ⁽⁴⁾ @ ft-bgs)		1.9 @ 11-13 3.1 @ 15-17 0.6 @ 18-20	16.8 @ 3-5 2.8 @ 7-9 40.6 @ 11-13 438 @ 16-17	6.8 @ 3-5 176 @ 7-9 >1999 @ 11-13 38 @ 15-17 >1999 @ 20-21	0 @ 0-4 0 @ 4-8 4 @ 8-12 8 @ 8-12	0 @ 0-4 0 @ 4-8 3 @ 8-12 9 @ 12-16 90 @ 16-20 40 @ 20-24	0 @ 0-4 0 @ 4-8 3 @ 8-12 9 @ 12-16 90 @ 16-20 40 @ 20-24	0 @ 0-20
Additional Observations			Highest OVM reading above perched groundwater - product (?)	Last OVM reading below groundwater.				

NOTES:

⁽¹⁾ ft-bgs = Feet Below Ground Surface⁽³⁾ OVM = Organic Vapor Monitor⁽²⁾ NR = No Recovery⁽⁴⁾ ppm = Parts per Million

TABLE 4.5-2
Summary of Field Observations
SWMU Group D: SWMU 10, 12, 15, and 16

Boring Number	SM012-			SM015-				SM016-
	TB01	TB02	TB03	TB01	TB02	TB03	TB04	TB01
Concrete/Asphalt (ft-bgs) ⁽¹⁾					0-0.5			
Gravel (ft-bgs)	0-0.5	0-0.5	0-1	0-0.5	8-13	0-6		0-2
Sand (ft-bgs)	0.5-2.5	0.5-3		0.5-9 / 21-25	21-25	19-21	0-4 / 19.5-20	17-21
Silty Sand (ft-bgs)					13-21	6-19	4-19.5	13-17
Silt/Clay (ft-bgs)	2.5-17	3-13	1-12 / 13-17	9-21	0.5-8	5-6		2-13
TDI Residue (ft-bgs)			12-13					
Perched Groundwater (ft-bgs)	3	3		11.6			3	9
Groundwater (ft-bgs)			16.7	20.8	21	19.7	19.7	20
Total Depth (ft-bgs)	17	17	17	25	25	21	20	21
OVM ⁽³⁾ Readings (ppm ⁽⁴⁾ @ ft-bgs)	0 @ 1-5 178 @ 5-9 498 @ 9-13 >1999 @ 13-17	0 @ 1-3 385 @ 3-5 51 @ 5-9 >1999 @ 9-13	0 @ 1-5 1 @ 5-9 >1999 @ 9-13 768 @ 13-17	0 @ 0-13 6 @ 13-17 0 @ 17-21 768 @ 13-17	29 @ 0-1 138 @ 1-3 2 @ 3-5 0 @ 5-9 2 @ 9-13 148 @ 13-17 14 @ 17-21 1 @ 21-25	17 @ 0-1 18 @ 1-3 0 @ 3-5 116 @ 5-9 >1999 @ 9-13 >1999 @ 13-17 >1999 @ 17-21	11 @ 0-1 29 @ 4-8 15 @ 8-12 148 @ 16-20 78 @ 13-17 231 @ 17-21	0 @ 1-3 2 @ 5-9 1 @ 9-13 78 @ 13-17
Additional Observations		No recovery from 13 to 17 ft bgs	Smeared brown product observed at 16 ft bgs					

NOTES:

⁽¹⁾ ft-bgs = Feet Below Ground Surface

⁽²⁾ NR = No Recovery

⁽³⁾ OVM = Organic Vapor Monitor

⁽⁴⁾ ppm = Parts per Million

JLE 4.5-3
Screening of Total Soils to Determined Screening Criteria: SWMU Group D

Constituent	CAS Number	Units	Frequency of Detection	Range of Detections	Sample of Maximum Detection	Range of Detection	Sample of Maximum Detection Limits	Region III Industrial Soil RBC ¹	Region III Residential Soil RBC ¹	Maximum Detection or Detection Limit Exceeds Industrial RBC	Maximum Detection or Detection Limit Exceeds Residential RBC	
METALS												
Chromium	7440-47-3	mg/kg	108 - 108	2.54 - 2126	SM012-TB02-00913	NA	SM016-TB01-1517	6.1E+03	2.3E+02	No	Max. Det.>Res RBC	
Nickel	7440-02-0	mg/kg	108 - 108	4.62 - 18602	SM012-TB01-1317	NA	SM010-TB08-0709	4.1E+04	1.6E+03	No	Max. Det.>Res RBC	
PESTICIDES/HERBICIDES												
Heptachlor	76-44-8	mg/kg	0 - 100	NA		0.09 - 78.3	SM012-TB01-1317	1.3E+00	1.4E-01	Max. D.L.>RBC	Max. D.L.>Res RBC	
SEMICVOLATILE ORGANIC COMPOUNDS												
1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	1 - 104	3.13 J - 3.13	J	SM010-TB09-0305	0.12 - 85.4	SM012-TB01-1317	6.1E+02	2.3E+01	No	Max. D.L.>Res RBC
1,2-Dichlorobenzene	95-50-1	mg/kg	65 - 104	0.26 - 8700		SM012-TB01-0709	0.1 - 12.8	SM010-TB20-1617	1.8E+05	7.0E+03	No	Max. Det.>Res RBC
1,3-Dichlorobenzene	541-73-1	mg/kg	1 - 104	0.56 - 0.56		SM010-TB21-0709	0.09 - 71.2	SM012-TB01-1317	1.8E+03	7.0E+01	No	Max. D.L.>Res RBC
1,4-Dichlorobenzene	106-46-7	mg/kg	23 - 104	0.3 J - 130		SM012-TB01-0709	0.1 - 71.2	SM012-TB01-1317	2.4E+02	2.7E+01	No	Max. Det. & D.L. > Res RBC
2,4,6-Trichlorophenol	88-06-2	mg/kg	0 - 103	NA		0.11 - 71.2	SM012-TB01-1317	5.2E+02	5.8E+01	No	Max. D.L.>Res RBC	
2,4-Dinitrophenol	51-28-5	mg/kg	0 - 103	NA		0.77 - 441	SM012-TB01-1317	4.1E+03	1.6E+02	No	Max. D.L.>Res RBC	
2,4-Dinitrotoluene	121-14-2	mg/kg	33 - 104	0.11 - 1320		SM010-TB20-1820	0.1 - 71.2	SM012-TB01-1317	4.1E+03	1.6E+02	No	Max. Det.>Res RBC
2,4-Toluenediamine	95-80-7	mg/kg	4 - 99	4.9 - 3670		SM010-TB01-1113	1.07 - 356	SM012-TB01-1317	1.8E+00	2.0E-01	Max. Det. & D.L. > RBC	Max. Det. & D.L. > Res RBC
2,6-Dinitrotoluene	606-20-2	mg/kg	23 - 104	0.24 - 314		SM010-TB20-1820	0.12 - 71.2	SM012-TB01-1317	2.0E+03	7.8E+01	No	Max. Det.>Res RBC
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0 - 104	NA		0.26 - 434	SM012-TB01-1317	1.3E+01	1.4E+00	Max. D.L.>RBC	Max. D.L.>Res RBC	
4,6-Dinitro-o-cresol	534-52-1	mg/kg	0 - 103	NA		0.21 - 140	SM012-TB01-0709	2.0E+02	7.8E+00	No	Max. D.L.>Res RBC	
5-Nitro-o-toluidine	99-55-8	mg/kg	13 - 104	0.35 - 47		SM012-TB01-0709	0.1 - 71.2	SM012-TB01-1317	1.7E+02	1.9E+01	No	Max. Det. & D.L. > Res RBC
Aniline	62-53-3	mg/kg	29 - 104	0.37 - 2260		SM012-TB01-1317	0.3 - 67.2	SM010-TB20-1820	1.0E+03	1.1E+02	Max. Det.>RBC	Max. Det.>Res RBC
Azobenzene	103-33-3	mg/kg	1 - 104	0.34 - 0.34		SM012-TB01-0305	0.13 - 85.4	SM012-TB01-1317	5.2E+01	5.8E+00	Max. D.L.>RBC	Max. D.L.>Res RBC
Benzidine	92-87-5	mg/kg	0 - 104	NA		1.4 - 1140	SM012-TB01-1317	2.5E-02	3.0E-03	No	Max. D.L.>Res RBC	
Benz(a)anthracene	56-55-3	mg/kg	0 - 104	NA		0.12 - 92.5	SM012-TB01-1317	7.8E+00	8.8E-01	Max. D.L.>RBC	Max. D.L.>Res RBC	
Benz(a)pyrene	50-32-8	mg/kg	1 - 104	0.27 - 0.27		SM010-TB12-0305	0.12 - 71.2	SM012-TB01-1317	7.8E-01	8.7E-02	Max. D.L.>RBC	Max. D.L.>Res RBC
Benz(b)fluoranthene	205-99-2	mg/kg	2 - 104	0.25 - 0.45	J	SM010-TB19-0001	0.1 - 71.2	SM012-TB01-1317	7.8E+00	8.8E-01	Max. D.L.>RBC	Max. D.L.>Res RBC
Benz(k)fluoranthene	207-08-9	mg/kg	2 - 104	0.32 J - 0.33		SM010-TB12-0305	0.13 - 71.2	SM012-TB01-1317	7.8E+01	8.8E+00	No	Max. D.L.>Res RBC
bis(2-Chloroethyl)ether	111-44-4	mg/kg	2 - 104	1.65 - 5.54		SM010-TB21-0709	0.1 - 71.2	SM012-TB01-1317	5.2E+00	5.8E-01	Max. Det. & D.L. > RBC	Max. Det. & D.L. > Res RBC
bis(2-Chloroisopropyl)ether	108-60-1	mg/kg	3 - 104	1.38 J - 1.49	J	SM010-TB19-1820	0.1 - 71.2	SM012-TB01-1317	8.2E+01	9.1E+00	No	Max. D.L.>Res RBC
bis(2-Ethylhexyl) phthalate	117-81-7	mg/kg	39 - 104	0.28 - 1.16	B	SM010-TB21-0305	0.12 - 85.4	SM012-TB01-1317	4.1E+02	4.6E+01	No	Max. D.L.>Res RBC
Carbazole	86-74-8	mg/kg	0 - 100	NA		0.08 - 356	SM012-TB01-1317	2.9E+02	3.2E+01	Max. D.L.>RBC	Max. D.L.>Res RBC	
Dibenz(a,h)anthracene	53-70-3	mg/kg	0 - 104	NA		0.14 - 71.2	SM012-TB01-1317	7.8E-01	8.7E-02	Max. D.L.>RBC	Max. D.L.>Res RBC	
Hexachlorobenzene	118-74-1	mg/kg	0 - 104	NA		0.15 - 71.2	SM012-TB01-1317	3.6E+00	4.0E-01	Max. D.L.>RBC	Max. D.L.>Res RBC	
Hexachlorobutadiene	87-68-3	mg/kg	0 - 104	NA		0.1 - 71.2	SM012-TB01-1317	7.3E+01	8.2E+00	No	Max. D.L.>Res RBC	
Hexachlorocyclopentadiene	77-47-4	mg/kg	0 - 104	NA		0.21 - 550	SM012-TB01-0709	1.4E+04	5.5E+02	No	Max. D.L.>Res RBC	
Hexachloroethane	67-72-1	mg/kg	0 - 104	NA		0.1 - 71.2	SM012-TB01-1317	4.1E+02	4.6E+01	No	Max. D.L.>Res RBC	
Indeno[1,2,3-cd]pyrene	193-39-5	mg/kg	0 - 104	NA		0.15 - 71.2	SM012-TB01-1317	7.8E+00	8.8E-01	Max. D.L.>RBC	Max. D.L.>Res RBC	
m-Toluidine	108-44-1	mg/kg	3 - 104	0.46 J - 46.4		SM012-TB02-0305	0.09 - 142	SM012-TB01-1317	3.0E+01	3.4E+00	Max. Det. & D.L. > RBC	Max. Det. & D.L. > Res RBC
Nitrobenzene	98-95-3	mg/kg	27 - 104	0.22 J - 8040		SM012-TB01-1317	0.1 - 27.5	SM015-TB03-1316	1.0E+03	3.9E+01	Max. Det.>RBC	Max. Det.>Res RBC
N-Nitrosodibutylamine	924-16-3	mg/kg	0 - 104	NA		0.13 - 71.2	SM012-TB01-1317	1.1E+00	1.2E-01	Max. D.L.>RBC	Max. D.L.>Res RBC	
N-Nitrosodimethylamine	62-75-9	mg/kg	0 - 104	NA		0.1 - 71.2	SM012-TB01-1317	1.1E-01	1.3E-02	Max. D.L.>RBC	Max. D.L.>Res RBC	
n-Nitroso-di-n-propylamine	621-64-7	mg/kg	0 - 104	NA		0.1 - 71.2	SM012-TB01-1317	8.2E-01	9.1E-02	Max. D.L.>RBC	Max. D.L.>Res RBC	
o,p-Toluidine	106-49-0	mg/kg	4 - 104	0.49 - 341		SM012-TB02-0305	0.08 - 363	SM012-TB01-1317	3.0E+01	3.4E+00	Max. Det. & D.L. > RBC	Max. Det. & D.L. > Res RBC
p-Chloroaniline	106-47-8	mg/kg	22 - 104	0.21 - 490		SM012-TB01-0709	0.09 - 71.2	SM012-TB01-1317	8.2E+03	3.1E+02	No	Max. Det.>Res RBC
Pentachlorobenzene	608-93-5	mg/kg	0 - 104	NA		0.12 - 121	SM012-TB01-1317	1.6E+03	6.3E+01	No	Max. D.L.>Res RBC	
Pentachloronitrobenzene	82-68-8	mg/kg	0 - 104	NA		0.08 - 71.2	SM012-TB01-1317	2.2E+01	2.5E+00	Max. D.L.>RBC	Max. D.L.>Res RBC	
Pentachlorophenol	87-86-5	mg/kg	0 - 103	NA		0.21 - 100	SM012-TB01-0709	4.8E+01	5.3E+00	Max. D.L.>RBC	Max. D.L.>Res RBC	
Pyridine	110-86-1	mg/kg	0 - 104	NA		0.1 - 78.3	SM012-TB01-1317	2.0E+03	7.8E+01	No	Max. D.L.>Res RBC	
Trimethylphosphate	512-56-1	mg/kg	0 - 104	NA		0.1 - 71.2	SM012-TB01-1317	1.5E+02	1.7E+01	No	Max. D.L.>Res RBC	
VOLATILE ORGANIC COMPOUNDS												
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0 - 110	NA		0.25 - 60.7	SM012-TB03-1113	2.2E+02	2.5E+01	No	Max. D.L.>Res RBC	
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	2.9E+01	3.2E+00	Max. D.L.>RBC	Max. D.L.>Res RBC	
1,1,2-Trichloroethane	79-00-5	mg/kg	0 - 110	NA		0.25 - 60.7	SM012-TB03-1113	1.0E+02	1.1E+01	No	Max. D.L.>Res RBC	
1,1-Dichloroethene	75-35-4	mg/kg	3 - 110	1.29 - 2.73		SM010-TB08-0709	0.25 - 60.7	SM012-TB03-1113	9.5E+00	1.1E+00	Max. D.L.>RBC	Max. Det. & D.L. > Res RBC
1,1-Dichloropropene	563-58-6	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	3.2E+01	3.5E+00	No	Max. D.L.>Res RBC	
1,2,3-Trichloropropane	96-18-4	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	8.2E-01	9.1E-02	Max. D.L.>RBC	Max. D.L.>Res RBC	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg	0 - 110	NA		0.25 - 60.7	SM012-TB03-1113	4.1E+00	4.6E-01	Max. D.L.>RBC	Max. D.L.>Res RBC	
1,2-Dibromoethane	106-93-4	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	6.7E-02	8.0E-03	Max. D.L.>RBC	Max. D.L.>Res RBC	

TABLE 4.5-3
Screening of Total Soils to Risk-Based Screening Criteria: SWMU Group D

Constituent	CAS Number	Units	Frequency of Detection	Range of Detections	Sample of Maximum Detection	Range of Detection Limits	Sample of Maximum Detection Limit	Region III Industrial Soil RBC ¹	Region III Residential Soil RBC ¹	Maximum Detection or Detection Limit Exceeds Industrial RBC	Maximum Detection or Detection Limit Exceeds Residential RBC
1,2-Dichloroethane	107-06-2	mg/kg	0 - 110	NA		0.25 - 60.7	SM012-TB03-1113	6.3E+01	7.0E+00	No	Max. D.L. >Res RBC
1,2-Dichloropropane	78-87-5	mg/kg	0 - 110	NA		0.38 - 91	SM012-TB03-1113	8.4E+01	9.4E+00	Max. D.L. >RBC	Max. D.L. >Res RBC
1,3-Dichloropropane	142-28-9	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	8.4E+01	9.4E+00	No	Max. D.L. >Res RBC
2,2-Dichloropropane	590-20-7	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	8.4E+01	9.4E+00	No	Max. D.L. >Res RBC
Acrylonitrile	107-13-1	mg/kg	0 - 110	NA		1.3 - 303	SM012-TB03-1113	1.1E+01	1.2E+00	Max. D.L. >RBC	Max. D.L. >Res RBC
Benzene	71-43-2	mg/kg	38 - 110	0.162 J - 12600	J	0.13 - 6.39	SM010-TB12-1010	2.0E+02	2.2E+01	Max. Det.>RBC	Max. Det.>Res RBC
Bromodichloromethane	75-27-4	mg/kg	0 - 110	NA		0.25 - 60.7	SM012-TB03-1113	9.2E+01	1.0E+01	No	Max. D.L. >Res RBC
Carbon tetrachloride	56-23-5	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	4.4E+01	4.9E+00	No	Max. D.L. >Res RBC
Chlorobenzene	108-90-7	mg/kg	71 - 110	0.148 J - 27900		0.136 - 0.164	SM010-TB21-0001	4.1E+04	1.6E+03	No	Max. Det.>Res RBC
Chloromethane	74-87-3	mg/kg	0 - 110	NA		0.25 - 60.7	SM012-TB03-1113	4.4E+02	4.9E+01	No	Max. D.L. >Res RBC
cis-1,3-Dichloro-1-propene	10061-01-5	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	3.2E+01	3.5E+00	No	Max. D.L. >Res RBC
Dibromo-chloromethane	124-48-1	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	6.8E+01	7.6E+00	No	Max. D.L. >Res RBC
Methylene chloride	75-09-2	mg/kg	4 - 110	5.8 J - 1370		0.25 - 60.7	SM012-TB03-1113	7.6E+02	8.5E+01	Max. Det.>RBC	Max. Det.>Res RBC
Tetrachloroethene	127-18-4	mg/kg	1 - 110	0.336 J - 0.336	J	0.13 - 30.3	SM012-TB03-1113	1.1E+02	1.2E+01	No	Max. D.L. >Res RBC
trans-1,3-Dichloropropene	10061-02-6	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	3.2E+01	3.5E+00	No	Max. D.L. >Res RBC
Vinyl Chloride	75-01-4	mg/kg	0 - 110	NA		0.25 - 60.7	SM012-TB03-1113	3.0E+00	3.4E-01	Max. D.L. >RBC	Max. D.L. >Res RBC

¹Industrial and Residential RBCs for Soil (USEPA, 1999)

TABLE 4.5-4
Screening of Total Soils to USEPA Screening Soil Screening Levels: SWMU Group D

Constituent	CAS Number	Units	Frequency of Detection	Range of Detections	Sample of Maximum Detection	Range of Detection Limits	Sample of Maximum Detection Limit	Soil Screening Level ¹ 20 DAF	Maximum Detection or Detection Limit Exceeds RBC	
METALS										
Antimony	7440-36-0	mg/kg	1 - 108	23.5 - 23.5	SM010-TB11-0305	0.4 - 2.68	SM010-TB11-0608	5.0E+00	Max. Det>SSL	
Cadmium	7440-43-9	mg/kg	102 - 108	0.49 - 332	SM010-TB12-1010	0.43 - 0.67	SM010-TB22-0911	8.0E+00	Max. Det>SSL	
Chromium	7440-47-3	mg/kg	108 - 108	2.54 - 2126	SM012-TB02-00913	NA	SM016-TB01-1517	3.8E+01	Max. Det>SSL	
Nickel	7440-02-0	mg/kg	108 - 108	4.62 - 18602	SM012-TB01-1317	NA	SM010-TB08-0709	1.3E+02	Max. Det>SSL	
PESTICIDES/HERBICIDES										
Heptachlor	76-44-8	mg/kg	0 - 100	NA		0.09 - 78.3	SM012-TB01-1317	2.3E+01	Max. D.L. >SSL	
SEMIVOLATILE ORGANIC COMPOUNDS										
1,2,3-Trichlorobenzene	87-61-6	mg/kg	0 - 104	NA		0.11 - 85.4	SM012-TB01-1317	5.0E+00	Max. D.L. >SSL	
1,2,4-Trichlorobenzene	120-82-1	mg/kg	1 - 104	4.59 J - 4.59	J	SM010-TB09-0305	0.11 - 71.2	SM012-TB01-1317	5.0E+00	Max. D.L. >SSL
1,2-Dichlorobenzene	95-50-1	mg/kg	65 - 104	0.26 - 8700		SM012-TB01-0709	0.1 - 12.8	SM010-TB20-1617	1.7E+01	Max. Det>SSL
1,3-Dichlorobenzene	541-73-1	mg/kg	1 - 104	0.56 - 0.56		SM010-TB21-0709	0.09 - 71.2	SM012-TB01-1317	1.7E+01	Max. D.L. >SSL
1,4-Dichlorobenzene	106-46-7	mg/kg	23 - 104	0.3 J - 130		SM012-TB01-0709	0.1 - 71.2	SM012-TB01-1317	2.0E+00	Max. Det & D.L. > SSL
2,4,6-Trichlorophenol	88-06-2	mg/kg	0 - 103	NA		0.11 - 71.2	SM012-TB01-1317	2.0E-01	Max. D.L. >SSL	
2,4-Dichlorophenol	120-83-2	mg/kg	0 - 103	NA		0.12 - 71.2	SM012-TB01-1317	1.0E+00	Max. D.L. >SSL	
2,4-Dimethylphenol	105-67-9	mg/kg	0 - 103	NA		0.12 - 71.2	SM012-TB01-1317	9.0E+00	Max. D.L. >SSL	
2,4-Dinitrophenol	51-28-5	mg/kg	0 - 103	NA		0.77 - 441	SM012-TB01-1317	3.0E-01	Max. D.L. >SSL	
2,4-Dinitrotoluene	121-14-2	mg/kg	33 - 104	0.11 - 1320		SM010-TB20-1820	0.1 - 71.2	SM012-TB01-1317	8.0E-04	Max. Det & D.L. > SSL
2,6-Dichlorophenol	87-65-0	mg/kg	0 - 103	NA		0.12 - 71.2	SM012-TB01-1317	1.0E+00	Max. D.L. >SSL	
2,6-Dinitrotoluene	606-20-2	mg/kg	23 - 104	0.24 - 314		SM010-TB20-1820	0.12 - 71.2	SM012-TB01-1317	7.0E-04	Max. Det & D.L. > SSL
2-Chlorophenol	95-57-8	mg/kg	1 - 103	0.48 - 0.48		SM016-TB01-1517	0.1 - 71.2	SM012-TB01-1317	4.0E+00	Max. D.L. >SSL
2-Nitrodiphenylamine	86-30-6	mg/kg	0 - 104	NA		0.09 - 71.2	SM012-TB01-1317	1.0E+00	Max. D.L. >SSL	
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0 - 104	NA		0.26 - 434	SM012-TB01-1317	7.0E-03	Max. D.L. >SSL	
Benzo(a)anthracene	56-55-3	mg/kg	0 - 104	NA		0.12 - 92.5	SM012-TB01-1317	2.0E+00	Max. D.L. >SSL	
Benzo(a)pyrene	50-32-8	mg/kg	1 - 104	0.27 - 0.27		SM010-TB12-0305	0.12 - 71.2	SM012-TB01-0305	8.0E+00	Max. D.L. >SSL
Benzo(b)fluoranthene	205-99-2	mg/kg	2 - 104	0.25 - 0.45	J	SM010-TB19-0001	0.1 - 71.2	SM012-TB01-1317	5.0E+00	Max. D.L. >SSL
Benzo(k)fluoranthene	207-08-9	mg/kg	2 - 104	0.32 J - 0.33		SM010-TB12-0305	0.13 - 71.2	SM012-TB01-1317	4.9E+01	Max. D.L. >SSL
Benzoic Acid	65-85-0	mg/kg	0 - 103	NA		0.21 - 450	SM012-TB01-0709	4.0E+02	Max. D.L. >SSL	
bis(2-Chloroethyl)ether	111-44-4	mg/kg	2 - 104	1.65 - 5.54		SM010-TB21-0709	0.1 - 71.2	SM012-TB01-1317	4.0E-04	Max. Det. & D.L. > SSL
Carbazole	86-74-8	mg/kg	0 - 100	NA		0.08 - 356	SM012-TB01-1317	6.0E-01	Max. D.L. >SSL	
Dibenz(a,h)anthracene	53-70-3	mg/kg	0 - 104	NA		0.14 - 71.2	SM012-TB01-1317	2.0E+00	Max. D.L. >SSL	
Hexachlorobenzene	118-74-1	mg/kg	0 - 104	NA		0.15 - 71.2	SM012-TB01-1317	2.0E+00	Max. D.L. >SSL	
Hexachlorobutadiene	87-68-3	mg/kg	0 - 104	NA		0.1 - 71.2	SM012-TB01-1317	2.0E+00	Max. D.L. >SSL	
Hexachlorocyclopentadiene	77-47-4	mg/kg	0 - 104	NA		0.21 - 550	SM012-TB01-0709	4.0E+02	Max. D.L. >SSL	
Hexachloroethane	67-72-1	mg/kg	0 - 104	NA		0.1 - 71.2	SM012-TB01-1317	5.0E-01	Max. D.L. >SSL	
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0 - 104	NA		0.15 - 71.2	SM012-TB01-1317	1.4E+01	Max. D.L. >SSL	
Isophorone	78-59-1	mg/kg	0 - 104	NA		0.13 - 71.2	SM012-TB01-1317	5.0E-01	Max. D.L. >SSL	
m,p-Cresol	108-39-4	mg/kg	1 - 103	0.61 - 0.61		SM010-TB20-0305	0.2 - 107	SM012-TB01-1317	1.5E+01	Max. D.L. >SSL
Nitrobenzene	98-95-3	mg/kg	27 - 104	0.22 J - 8040		SM012-TB01-1317	0.1 - 27.5	SM015-TB03-1316	1.0E-01	Max. Det. & D.L. > SSL
n-Nitroso-di-n-propylamine	621-64-7	mg/kg	0 - 104	NA		0.1 - 71.2	SM012-TB01-1317	5.0E-05	Max. D.L. >SSL	
n-Nitrosodiphenylamine	86-30-6	mg/kg	0 - 104	NA		0.28 - 110	SM012-TB01-0709	1.0E+00	Max. D.L. >SSL	
o-Cresol	95-48-7	mg/kg	0 - 103	NA		0.09 - 71.2	SM012-TB01-1317	1.5E+01	Max. D.L. >SSL	
p-Chloroaniline	106-47-8	mg/kg	22 - 104	0.21 - 490		SM012-TB01-0709	0.09 - 71.2	SM012-TB01-1317	7.0E-01	Max. Det. & D.L. > SSL
Pentachlorophenol	87-86-5	mg/kg	0 - 103	NA		0.21 - 100	SM012-TB01-0709	3.0E-02	Max. D.L. >SSL	
VOLATILE ORGANIC COMPOUNDS										
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0 - 110	NA		0.25 - 60.7	SM012-TB03-1113	3.0E-03	Max. D.L. >SSL	
1,1,1-Trichloroethane	71-55-6	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	2.0E+00	Max. D.L. >SSL	
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	3.0E-03	Max. D.L. >SSL	
1,1,2-Trichloroethane	79-00-5	mg/kg	0 - 110	NA		0.25 - 60.7	SM012-TB03-1113	2.0E-02	Max. D.L. >SSL	
1,1-Dichloroethane	75-34-3	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	2.3E+01	Max. D.L. >SSL	
1,1-Dichloroethene	75-35-4	mg/kg	3 - 110	1.29 - 2.73		SM010-TB08-0709	0.25 - 60.7	SM012-TB03-1113	6.0E-02	Max. Det. & D.L. > SSL
1,1-Dichloropropene	563-58-6	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	4.0E-03	Max. D.L. >SSL	
1,2-Dichloroethane	107-06-2	mg/kg	0 - 110	NA		0.25 - 60.7	SM012-TB03-1113	2.0E-02	Max. D.L. >SSL	

TABLE 4.5-4
Screening of Total Soils to USEPA Leaching Soil Screening Levels: SWMU Group D

Constituent	CAS Number	Units	Frequency of Detection	Range of Detections	Sample of Maximum Detection	Range of Detection Limits	Sample of Maximum Detection Limit	Soil Screening Level ¹ 20 DAF	Maximum Detection or Detection Limit Exceeds RBC
1,2-Dichloropropane	78-87-5	mg/kg	0 - 110	NA		0.38 - 91	SM012-TB03-1113	3.0E-02	Max. D.L. >SSL
1,3-Dichloropropane	142-28-9	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	3.0E-02	Max. D.L. >SSL
2,2-Dichloropropane	590-20-7	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	3.0E-02	Max. D.L. >SSL
Acetone	67-64-1	mg/kg	0 - 110	NA		0.88 - 218	SM012-TB03-1113	1.6E+01	Max. D.L. >SSL
Benzene	71-43-2	mg/kg	38 - 110	0.162 J - 12600	J	SM012-TB01-1317	0.13 - 6.39	SM010-TB12-1010	3.0E-02
Bromodichloromethane	75-27-4	mg/kg	0 - 110	NA		0.25 - 60.7	SM012-TB03-1113	6.0E-01	Max. D.L. >SSL
Bromomethane	74-83-9	mg/kg	0 - 110	NA		0.38 - 91	SM012-TB03-1113	2.0E-01	Max. D.L. >SSL
Carbon disulfide	75-15-0	mg/kg	0 - 110	NA		0.38 - 91	SM012-TB03-1113	3.2E+01	Max. D.L. >SSL
Carbon tetrachloride	56-23-5	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	7.0E-02	Max. D.L. >SSL
Chlorobenzene	108-90-7	mg/kg	71 - 110	0.148 J - 27900		SM012-TB03-1113	0.136 - 0.164	SM010-TB21-0001	1.0E+00
cis-1,2-Dichloroethene	156-59-2	mg/kg	0 - 110	NA		0.25 - 60.7	SM012-TB03-1113	4.0E-01	Max. D.L. >SSL
Dibromochloromethane	124-48-1	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	4.0E-01	Max. D.L. >SSL
Ethylbenzene	100-41-4	mg/kg	6 - 110	0.151 J - 11.9	J	SM012-TB01-1317	0.13 - 30.3	SM012-TB03-1113	1.3E+01
Methylene chloride	75-09-2	mg/kg	4 - 110	5.8 J - 1370		SM012-TB01-1317	0.25 - 60.7	SM012-TB03-1113	2.0E-02
Styrene	100-42-5	mg/kg	1 - 110	15.9 - 15.9		SM012-TB02-0305	0.13 - 30.3	SM012-TB03-1113	4.0E+00
Tetrachloroethene	127-18-4	mg/kg	1 - 110	0.336 J - 0.336	J	SM010-TB20-1820	0.13 - 30.3	SM012-TB03-1113	6.0E-02
Toluene	108-88-3	mg/kg	29 - 110	0.158 J - 7120	J	SM012-TB01-1317	0.13 - 6.39	SM010-TB12-1010	1.2E+01
trans-1,2-Dichloroethene	156-60-5	mg/kg	0 - 110	NA		0.25 - 60.7	SM012-TB03-1113	7.0E-01	Max. D.L. >SSL
trans-1,3-Dichloropropene	10061-02-6	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	4.0E-03	Max. D.L. >SSL
Tribromomethane	75-25-2	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	8.0E-01	Max. D.L. >SSL
Trichloroethene	79-01-6	mg/kg	1 - 110	13.5 - 13.5		SM012-TB02-0305	0.13 - 30.3	SM012-TB03-1113	6.0E-02
Trichloromethane	67-66-3	mg/kg	0 - 110	NA		0.13 - 30.3	SM012-TB03-1113	6.0E-01	Max. D.L. >SSL
Vinyl Chloride	75-01-4	mg/kg	0 - 110	NA		0.25 - 60.7	SM012-TB03-1113	1.0E-02	Max. D.L. >SSL

¹ USEPA Soil Screening Levels (USEPA, 1996)

LE 4.5-5
Screening of Surface Soils (0 - 2 ft)
Risk-Based Screening Criteria: SWMU Group D

Constituent	CAS Number	Units	Frequency of Detection	Range of Detections	Sample of Maximum Detection	Range of Detection Limits	Sample of Maximum Detection Limit	Region III Industrial Soil RBC ¹	Maximum Detection or Detection Limit Exceeds RBC
PESTICIDES/HERBICIDES									
Heptachlor	76-44-8	mg/kg	0 - 27	NA		0.09 - 11.9	SM010-TB04-0001	1.3E+00	Max. D.L. >RBC
SEMIVOLATILE ORGANIC COMPOUNDS									
2,4-Toluenediamine	95-80-7	mg/kg	0 - 25	NA		1.07 - 54.2	SM010-TB06-0001	1.8E+00	Max. D.L. >RBC
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0 - 27	NA		0.28 - 66.1	SM010-TB06-0001	1.3E+01	Max. D.L. >RBC
Aniline	62-53-3	mg/kg	3 - 27	0.73 J - 11.4	B SM015-TB04-0001	0.3 - 15.2	SM010-TB06-0001	1.0E+03	No
Azobenzene	103-33-3	mg/kg	0 - 27	NA		0.13 - 13	SM010-TB06-0001	5.2E+01	No
Benzidine	92-87-5	mg/kg	0 - 27	NA		1.5 - 173	SM010-TB06-0001	2.5E-02	Max. D.L. >RBC
Benz(a)anthracene	56-55-3	mg/kg	0 - 27	NA		0.13 - 14.1	SM010-TB06-0001	7.8E+00	Max. D.L. >RBC
Benz(a)pyrene	50-32-8	mg/kg	0 - 27	NA		0.13 - 10.8	SM010-TB04-0001	7.8E-01	Max. D.L. >RBC
Benz(b)fluoranthene	205-99-2	mg/kg	1 - 27	0.45 J - 0.45	J SM010-TB19-0001	0.11 - 10.8	SM010-TB04-0001	7.8E+00	Max. D.L. >RBC
bis(2-Chloroethyl)ether	111-44-4	mg/kg	0 - 27	NA		0.11 - 10.8	SM010-TB18-0001	5.2E+00	Max. D.L. >RBC
Carbazole	86-74-8	mg/kg	0 - 27	NA		0.08 - 54.2	SM010-TB06-0001	2.9E+02	No
Dibenz(a,h)anthracene	53-70-3	mg/kg	0 - 27	NA		0.15 - 10.8	SM010-TB06-0001	7.8E-01	Max. D.L. >RBC
Hexachlorobenzene	118-74-1	mg/kg	0 - 27	NA		0.16 - 10.8	SM010-TB18-0001	3.6E+00	Max. D.L. >RBC
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0 - 27	NA		0.16 - 10.8	SM010-TB04-0001	7.8E+00	Max. D.L. >RBC
m-Toluidine	108-44-1	mg/kg	0 - 27	NA		0.09 - 21.7	SM010-TB06-0001	3.0E+01	No
Nitrobenzene	98-95-3	mg/kg	2 - 27	0.22 J - 2.17	J SM012-TB02-0001	0.11 - 10.8	SM010-TB06-0001	1.0E+03	No
N-Nitrosodibutylamine	924-16-3	mg/kg	0 - 27	NA		0.14 - 10.8	SM010-TB04-0001	1.1E+00	Max. D.L. >RBC
N-Nitrosodimethylamine	62-75-9	mg/kg	0 - 27	NA		0.11 - 10.8	SM010-TB18-0001	1.1E-01	Max. D.L. >RBC
n-Nitroso-di-n-propylamine	621-64-7	mg/kg	0 - 27	NA		0.11 - 10.8	SM010-TB18-0001	8.2E-01	Max. D.L. >RBC
o,p-Toluidine	106-49-0	mg/kg	1 - 27	1.6 - 1.6	SM010-TB10-0001	0.08 - 55.2	SM010-TB06-0001	3.0E+01	Max. D.L. >RBC
Pentachloronitrobenzene	82-68-8	mg/kg	0 - 27	NA		0.08 - 10.8	SM010-TB18-0001	2.2E+01	No
Pentachlorophenol	87-86-5	mg/kg	0 - 26	NA		0.21 - 10.8	SM010-TB18-0001	4.8E+01	No
VOLATILE ORGANIC COMPOUNDS									
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0 - 29	NA		0.136 - 0.302	SM015-TB04-0001	2.9E+01	No
1,1-Dichloroethene	75-35-4	mg/kg	0 - 29	NA		0.262 - 0.605	SM015-TB04-0001	9.5E+00	No
1,2,3-Trichloropropane	96-18-4	mg/kg	0 - 29	NA		0.136 - 0.302	SM015-TB04-0001	8.2E-01	No
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg	0 - 29	NA		0.262 - 0.605	SM015-TB04-0001	4.1E+00	No
1,2-Dibromoethane	106-93-4	mg/kg	0 - 29	NA		0.136 - 0.302	SM015-TB04-0001	6.7E-02	Max. D.L. >RBC
1,2-Dichloropropane	78-87-5	mg/kg	0 - 29	NA		0.398 - 0.907	SM015-TB04-0001	8.4E+01	No
Acrylonitrile	107-13-1	mg/kg	0 - 29	NA		1.36 - 3.02	SM015-TB04-0001	1.1E+01	No
Benzene	71-43-2	mg/kg	5 - 29	0.167 J - 2.9	J SM015-TB04-0001	0.136 - 0.156	SM010-TB03-0001	2.0E+02	No
Methylene chloride	75-09-2	mg/kg	0 - 29	NA		0.262 - 0.605	SM015-TB04-0001	7.6E+02	No
Vinyl Chloride	75-01-4	mg/kg	0 - 29	NA		0.262 - 0.605	SM015-TB04-0001	3.0E+00	No

¹ Region III Industrial RBCs for Soil (USEPA, Region III, 1999)

NOTE: Only those constituents whose detected concentration or detection limit exceeded the Industrial Soil RBC in the Total Soils Screening are presented here.

TABLE 4.5-6
Screening of Shallow Subsurface Soils (0 - 5 ft.) to Risk-Based Screening Criteria: SWMU Group D

Constituent	CAS Number	Units	Frequency of Detection	Range of Detections	Sample of Maximum Detection	Range of Detection	Sample of Maximum Detection Limit	Region III Industrial Soil RBC ¹	Maximum Detection or Detection Limit Exceeds RBC	
PESTICIDES/HERBICIDES										
Heptachlor	76-44-8	mg/kg	0 - 55	NA		0.09 - 15.9	SM012-TB02-0305	1.3E+00	Max. D.L. >RBC	
SEMIVOLATILE ORGANIC COMPOUNDS										
2,4-Toluenediamine	95-80-7	mg/kg	2 - 53	4.9 - 9.43	J	SM010-TB01-0305	1.07 - 72.5	SM012-TB02-0305	1.8E+00	Max. Det. & D.L. >RBC
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0 - 56	NA		0.26 - 88.4	SM012-TB02-0305	1.3E+01	Max. D.L. >RBC	
Aniline	62-53-3	mg/kg	13 - 56	0.73 J - 1080	SM012-TB02-0305	0.3 - 15.2	SM010-TB06-0001	1.0E+03	Max. Det.>RBC	
Azobenzene	103-33-3	mg/kg	1 - 56	0.34 - 0.34	SM012-TB01-0305	0.13 - 17.4	SM012-TB02-0305	5.2E+01	No	
Benzidine	92-87-5	mg/kg	0 - 56	NA		1.4 - 232	SM012-TB02-0305	2.5E-02	Max. D.L. >RBC	
Benz(a)anthracene	56-55-3	mg/kg	0 - 56	NA		0.12 - 18.8	SM012-TB02-0305	7.8E+00	Max. D.L. >RBC	
Benz(a)pyrene	50-32-8	mg/kg	1 - 56	0.27 - 0.27	J	SM010-TB12-0305	0.12 - 14.5	SM012-TB02-0305	7.8E-01	Max. D.L. >RBC
Benz(b)fluoranthene	205-99-2	mg/kg	2 - 56	0.25 - 0.45	J	SM010-TB19-0001	0.1 - 14.5	SM012-TB02-0305	7.8E+00	Max. D.L. >RBC
bis(2-Chloroethyl)ether	111-44-4	mg/kg	1 - 56	1.65 - 1.65	SM010-TB16-0305	0.1 - 14.5	SM012-TB02-0305	5.2E+00	Max. D.L. >RBC	
Carbazole	86-74-8	mg/kg	0 - 55	NA		0.08 - 72.5	SM012-TB02-0305	2.9E+02	No	
Dibenz(a,h)anthracene	53-70-3	mg/kg	0 - 56	NA		0.14 - 14.5	SM012-TB02-0305	7.8E-01	Max. D.L. >RBC	
Hexachlorobenzene	118-74-1	mg/kg	0 - 56	NA		0.15 - 14.5	SM012-TB02-0305	3.6E+00	Max. D.L. >RBC	
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	0 - 56	NA		0.15 - 14.5	SM012-TB02-0305	7.8E+00	Max. D.L. >RBC	
m-Toluidine	108-44-1	mg/kg	2 - 56	0.46 J - 46.4	SM012-TB02-0305	0.09 - 25.5	SM010-TB10-0305	3.0E+01	Max. Det.>RBC	
Nitrobenzene	98-95-3	mg/kg	7 - 56	0.22 J - 215	SM010-TB07-0305	0.1 - 14.5	SM012-TB02-0305	1.0E+03	No	
N-Nitrosodibutylamine	924-16-3	mg/kg	0 - 56	NA		0.13 - 14.5	SM012-TB02-0305	1.1E+00	Max. D.L. >RBC	
N-Nitrosodimethylamine	62-75-9	mg/kg	0 - 56	NA		0.1 - 14.5	SM012-TB02-0305	1.1E-01	Max. D.L. >RBC	
n-Nitroso-di-n-propylamine	621-64-7	mg/kg	0 - 56	NA		0.1 - 14.5	SM012-TB02-0305	8.2E-01	Max. D.L. >RBC	
o,p-Toluidine	106-49-0	mg/kg	3 - 56	0.49 - 341	SM012-TB02-0305	0.08 - 64.9	SM010-TB10-0305	3.0E+01	Max. Det. & D.L. >RBC	
Pentachloronitrobenzene	82-68-8	mg/kg	0 - 56	NA		0.08 - 14.5	SM012-TB02-0305	2.2E+01	No	
Pentachlorophenol	87-86-5	mg/kg	0 - 55	NA		0.21 - 14.5	SM012-TB02-0305	4.8E+01	No	
VOLATILE ORGANIC COMPOUNDS										
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0 - 58	NA		0.136 - 1.45	SM012-TB02-0305	2.9E+01	No	
1,1-Dichloroethene	75-35-4	mg/kg	1 - 58	1.29 - 1.29	SM010-TB08-0305	0.262 - 2.9	SM012-TB02-0305	9.5E+00	No	
1,2,3-Trichloropropane	96-18-4	mg/kg	0 - 58	NA		0.136 - 1.45	SM012-TB02-0305	8.2E-01	Max. D.L. >RBC	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg	0 - 58	NA		0.262 - 2.9	SM012-TB02-0305	4.1E+00	No	
1,2-Dibromoethane	106-93-4	mg/kg	0 - 58	NA		0.136 - 1.45	SM012-TB02-0305	6.7E-02	Max. D.L. >RBC	
1,2-Dichloropropane	78-87-5	mg/kg	0 - 58	NA		0.398 - 4.35	SM012-TB02-0305	8.4E+01	No	
Acrylonitrile	107-13-1	mg/kg	0 - 58	NA		1.36 - 14.5	SM012-TB02-0305	1.1E+01	Max. D.L. >RBC	
Benzene	71-43-2	mg/kg	14 - 58	0.167 J - 217	SM012-TB02-0305	0.136 - 0.168	SM010-TB11-0305	2.0E+02	Max. Det.>RBC	
Methylene chloride	75-09-2	mg/kg	1 - 58	5.8 J - 5.8	J	SM012-TB02-0305	0.262 - 0.636	SM010-TB10-0305	7.6E+02	No
Vinyl Chloride	75-01-4	mg/kg	0 - 58	NA		0.262 - 2.9	SM012-TB02-0305	3.0E+00	No	

¹ Region III Industrial RBCs for Soil (USEPA, Region III, 1999)

NOTE: Only those constituents whose detected concentration or detection limit exceeded the Industrial Soil RBC in the Total Soils Screening are presented here.

LE 4.5-7
Screening of Total Soils to Site-specific Screening Levels: SWMU Group D

Constituent	CAS Number	Units	Frequency of Detection	Range of Detections	Sample of Maximum Detection	Range of Detection Limits	Sample of Maximum Detection Limit	Site-specific Soil Screening Level ¹	Maximum Detection or Detection Limit Exceeds RBC	
METALS										
Antimony	7440-36-0	mg/kg	1 - 108	23.5 - 23.5	SM010-TB11-0305	0.4 - 2.68	SM010-TB11-0608	5.6E+01	No	
Cadmium	7440-43-9	mg/kg	102 - 108	0.49 - 332	SM010-TB12-1010	0.43 - 0.67	SM010-TB22-0911	2.9E+02	Max. Det.>SSL	
Chromium	7440-47-3	mg/kg	108 - 108	2.54 - 2126	SM012-TB02-00913	NA	SM016-TB01-1517	3.4E+02	Max. Det.>SSL	
Nickel	7440-02-0	mg/kg	108 - 108	4.62 - 18602	SM012-TB01-1317	NA	SM010-TB08-0709	3.7E+03	Max. Det.>SSL	
SEMOVOLATILE ORGANIC COMPOUNDS										
1,2-Dichlorobenzene	95-50-1	mg/kg	65 - 104	0.26 - 8700	SM012-TB01-0709	0.1 - 12.8	SM010-TB20-1617	4.1E+02	Max. Det.>SSL	
1,4-Dichlorobenzene	106-46-7	mg/kg	23 - 104	0.3 J - 130	SM012-TB01-0709	0.1 - 71.2	SM012-TB01-1317	5.2E+01	Max. Det. & D.L. > SSL	
2,4-Dinitrotoluene	121-14-2	mg/kg	33 - 104	0.11 - 1320	SM010-TB20-1820	0.1 - 71.2	SM012-TB01-1317	1.0E+01	Max. Det. & D.L. > SSL	
2,6-Dinitrotoluene	606-20-2	mg/kg	23 - 104	0.24 - 314	SM010-TB20-1820	0.12 - 71.2	SM012-TB01-1317	4.1E+00	Max. Det. & D.L. > SSL	
bis(2-Chloroethyl)ether	111-44-4	mg/kg	2 - 104	1.65 - 5.54	SM010-TB21-0709	0.1 - 71.2	SM012-TB01-1317	5.0E-04	Max. Det. & D.L. > SSL	
Nitrobenzene	98-95-3	mg/kg	27 - 104	0.22 J - 8040	SM012-TB01-1317	0.1 - 27.5	SM015-TB03-1316	3.6E-01	Max. Det. & D.L. > SSL	
p-Chloroaniline	106-47-8	mg/kg	22 - 104	0.21 - 490	SM012-TB01-0709	0.09 - 71.2	SM012-TB01-1317	1.6E+01	Max. Det. & D.L. > SSL	
VOLATILE ORGANIC COMPOUNDS										
1,1-Dichloroethene	75-35-4	mg/kg	3 - 110	1.29 - 2.73	SM010-TB08-0709	0.25 - 60.7	SM012-TB03-1113	7.0E-01	Max. Det. & D.L. > SSL	
Benzene	71-43-2	mg/kg	38 - 110	0.162 J - 12600	J	SM012-TB01-1317	0.13 - 6.39	SM010-TB12-1010	5.0E-01	Max. Det. & D.L. > SSL
Chlorobenzene	108-90-7	mg/kg	71 - 110	0.148 J - 27900	SM012-TB03-1113	0.136 - 0.164	SM010-TB21-0001	1.1E+01	Max. Det.>SSL	
Methylene chloride	75-09-2	mg/kg	4 - 110	5.8 J - 1370	SM012-TB01-1317	0.25 - 60.7	SM012-TB03-1113	3.9E-01	Max. Det. & D.L. > SSL	
Styrene	100-42-5	mg/kg	1 - 110	15.9 - 15.9	SM012-TB02-0305	0.13 - 30.3	SM012-TB03-1113	1.3E+02	No	
Tetrachloroethene	127-18-4	mg/kg	1 - 110	0.336 J - 0.336	J	SM010-TB20-1820	0.13 - 30.3	SM012-TB03-1113	1.0E+00	Max. D.L. >SSL
Toluene	108-88-3	mg/kg	29 - 110	0.158 J - 7120	J	SM012-TB01-1317	0.13 - 6.39	SM010-TB12-1010	2.3E+02	Max. Det.>SSL
Trichloroethene	79-01-6	mg/kg	1 - 110	13.5 - 13.5	SM012-TB02-0305	0.13 - 30.3	SM012-TB03-1113	1.7E+00	Max. Det. & D.L. > SSL	

¹ Soil Screening Levels calculated as per USEPA SSL Guidance (1996); see Appendix F-2

NOTE: Only those constituents whose detected concentration exceeded the USEPA SSL are presented here.

TABLE 4.5-8

**Exposure Point Concentrations for Constituents of Interest
SWMU Group D**

Depth Interval	Constituent of Interest	Maximum Detected Concentration mg/kg	Distribution	95% UCL mg/kg	EPC mg/kg
0-5 feet	Aniline	1,080	Assume Lognormal	17.8	17.8
0-5 feet	Benzene	217	Assume Lognormal	0.932	0.932
0-5 feet	o,p-Toluidine	341	Assume Lognormal	15.0	15.0
0-5 feet	m-Toluidine	46.4	Lognormal	4.0	4.0
0-5 feet	2,4-Toluenediamine	9.43	Assume Lognormal	8.7	8.7

TABLE 4.5-9

Construction Worker Scenario
Risk and Hazard Summary
SWMU Group D

Constituent of Interest	Ingestion	Dermal	Inhalation of Particulates	Inhalation of Volatiles	TOTAL RISK
Summary of Theoretical Excess Lifetime Cancer Risks					
Construction Worker					
2,4-Toluenediamine	9.71E-07	4.05E-07	NA	NA	1.38E-06
o,p-Toluidine	9.94E-08	4.14E-08	NA	NA	1.41E-07
m-Toluidine	2.65E-08	1.10E-08	NA	NA	3.75E-08
Benzene	9.43E-10	1.18E-10	5.95E-14	4.04E-10	1.47E-09
Aniline	3.54E-09	1.47E-09	NA	NA	5.01E-09
TOTAL	1.10E-06	4.59E-07	5.95E-14	4.04E-10	1.56E-06

Constituent of Interest	Ingestion	Dermal	Inhalation of Particulates	Inhalation of Volatiles	TOTAL HAZARD
Summary of Theoretical Noncancer Hazards					
Construction Worker					
Benzene	0.00	0.000	0.00000008	0.00057	0.00143
Aniline	0.0062	0.0026	0.0000003	NA	0.0088
TOTAL	0.01	0.003	0.0000004	0.00057	0.010

4.6 SWMU 13: Existing Process Trench

SWMU 13 (Existing Process Trench) consists of a main trench and feeder branches and is located along the axis of the facility, to the east of SWMU 10. It is used to convey unit wastes by gravity flow to the plant's wastewater treatment plant. The process trench is a reinforced concrete structure of varying depth. The main branch of the process trench and areas that may contain acidic wastewater are lined with stainless steel.

4.6.1 RFI SCOPE OF WORK

The RFI scope of work at SWMU 13 consisted of a soil gas survey performed during Phase 1 and soil sampling performed during Phase 2.

4.6.1.1 Phase 1 Scope of Work

Soil Gas Survey

The soil gas survey of SWMU 13 is shown on Figures C-5 through C-10 of Appendix C. Total VOC concentrations in soil gas are considered to be elevated if found above 100 µg/L. This is considered to be a conservative cut-off and was derived after several years of comparing actual soil chemistry results with soil gas results.

The northern portion of SWMU 13 has one area with elevated total VOCs at the 2.5 ft-bgs interval. This is located in the northeast corner of Block 25 (Figure C-9 in Appendix C) and may be attributable to constituents from SWMU 10. The major constituents for this area are toluene (maximum concentration of 949 µg/L), benzene (maximum concentration of 206 µg/L), and chlorobenzene (maximum concentration of 136 µg/L).

The 7.5 ft-bgs interval for SWMU 13 (Figure C-10 in Appendix C) also has total VOC concentrations dominated by benzene (maximum concentration of 5,220 µg/L), toluene (maximum concentration of 1,790 µg/L), and chlorobenzene (maximum concentration of 124 µg/L), which may actually be part of SWMU 10.

4.6.1.2 Phase 2

The scope of work for Phase 2 was based on the findings of the previous investigation work and on the Work Plan. Eight test borings were installed for the purpose of collecting samples for

laboratory and geotechnical analysis for the existing process trench. However, SWMUs 10, 24, and 27 also have soil borings within or very near SWMU 13 boundaries.

Test borings in SWMU 13 were drilled to depths ranging from 17 to 25 ft-bgs, with the majority of the borings reaching 21 ft-bgs. Samples were collected from each boring at the surface (0 to 1 or 2 ft-bgs) and the shallow subsurface (3 to 5 ft-bgs). Additional samples were taken from areas with elevated OVM readings and the two-foot interval above groundwater. The samples were submitted for analysis of SVOCs, metals, VOCs and TOCs. Table 4.6-1 presents the complete soil analytical results for SWMU 13 and Figure 4.6-1 provides selected soil analytical results on a plan view map.

4.6.2 Field Observations

The boring logs for SWMU 13 (Appendix D) indicate that subsurface materials encountered during Phase 2 consist of gravel, sandy silts, silty to sandy clays, and sands. Table 4.6-2 summarizes the field observations for the test borings in SWMU 13. Trace amounts of TDI residue mixed with a fine to coarse sandy clay residue were found in test boring SM013-TB01 from 9 to 13 ft-bgs. Test Borings SM013-TB01, -TB02, -TB05, and -TB08 were drilled through asphalt into a gravel subbase typically 0.5 to 2 feet thick. All other borings were drilled through gravel prior to encountering yellowish brown sands and dark gray to brown silty and sandy clays.

Three test borings (SM013-TB02, -TB03, and -TB04) encountered perched groundwater between 11 and 15.2 ft-bgs. All test borings encountered the alluvial aquifer.

4.6.3 Risk Assessment Results

4.6.3.1 Comparison to Risk-based Criteria

Table 4.6-1 provides the complete analytical results for SWMU 13, and Figure 4.6-1 summarizes the analytical results on a plan view map. Table 4.6-3 presents a summary of all detected constituents at SWMU 13, and constituents with maximum detections or detection limits exceeding the screening criteria. In addition to maximum detected concentrations and detection limits, Table 4.6-3 also presents frequency of detection, USEPA risk-based screening criteria, default soil to groundwater SSLs (dilution attenuation factor of 20), and comparisons to the screening criteria. Bayer has been designated as an industrial facility; therefore, industrial soil

RBCs are applicable for RFI decisions. Residential soil RBCs are presented to fulfill USEPA Region III documentation requirements.

One SVOC (benzo(b)fluoranthene) has a maximum detected concentration that exceeds the Region III RBCs for both industrial and residential soils, while three SVOCs (benzo(a)pyrene, indeno(1,2,3-cd)pyrene and nitrobenzene) have maximum detected concentrations which exceed Region III RBCs for residential soil only. In addition, 12 organics have maximum detection limits that exceed the RBCs for both industrial and residential soils, while 11 additional organics have maximum detection limits that exceed the RBCs for residential soil.

One metal (nickel), two VOCs (chlorobenzene and toluene) and five SVOCs (2,4-dinitrotoluene, 2,6-dinitrotoluene, benzo(b)fluoranthene, nitrobenzene, and p-chloroaniline) have maximum detected concentrations that exceed the default USEPA SSLs. In addition, 35 organics have maximum detection limits that exceed the default USEPA SSLs.

In order to further evaluate the soil to groundwater migration pathway, site-specific SSLs were developed as discussed in the following paragraph.

4.6.3.2 Site Specific Soil Screening Levels

SSLs were derived for SWMU 13 using site-specific data to further evaluate whether the constituents detected at levels exceeding the default USEPA SSLs or having maximum detection limits exceeding the default SSLs could have the potential to migrate from soil to groundwater at levels of concern. Site-specific SSLs were calculated for each constituent that exceeds the default USEPA SSL or has a maximum detection limit that exceeds the default SSL. The maximum detected concentrations and detection limits of constituents were then compared to the site-specific SSLs.

Table 4.6-4 presents the resulting SSLs, along with the maximum detections and detection limits, and an indication of whether the maximum detected concentration or detection limit exceeds the site-specific SSL. One VOC (chlorobenzene) and three SVOCs (2,6-dinitrotoluene, nitrobenzene, and p-chloroaniline) have maximum detected concentrations that exceed the calculated site-specific SSLs for SWMU 13. Nine VOCs (1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,2-dichloroethane, 1,2-dichloropropane, bromomethane, cis-1,3-dichloropropene, methylene chloride, trans-1,3-dichloropropene, and vinyl chloride) and nine SVOCs (2,4,6-trichlorophenol, 2,4-dinitrophenol, 3,3'-dichlorobenzidine, bis(2-

chloroethyl)ether, carbazole, hexachloroethane, n-nitrosodipropylamine, nitrobenzene and pentachlorophenol) have maximum detection limits that exceed the site-specific SSLs.

4.6.3.3 Site Specific Analysis

The above results indicate that no further action is necessary for SWMU 13. The reasons for assigning this SWMU to the NFA category include:

- Benzo(b)fluoranthene was detected only in one sample (SM013-TB02-0001) with a concentration that exceeds the industrial RBC. However, this sample was a surface sample, which included asphalt that covers the surface of SWMU 13 and appears to be the source of the PAHs. No other sample from this SWMU had detections of PAHs.
- The maximum detections of chlorobenzene, 2,6-dinitrotoluene and nitrobenzene that exceeded the site-specific SSLs were the only detections that exceeded the site-specific SSLs. Chlorobenzene was detected in sample SM013-TB02-1113, while 2,6-dinitrotoluene and nitrobenzene were detected in sample SM013-TB05-1719. There were no other detections of either constituent and all other samples were less than a maximum detection limit of 0.17 mg/kg for chlorobenzene and 2.28 mg/kg for 2,6-dinitrotoluene and nitrobenzene. While this detection limit is less than the site-specific SSL for 2,6-dinitrotoluene (3.5 mg/kg), it is greater than the site-specific SSL for nitrobenzene (0.31 mg/kg). Two samples (SM013-TB01-0001 and SM013-TB02-0305) had this elevated detection limit for nitrobenzene, and all other samples had detection limits for nitrobenzene that are less than the site-specific SSL.
- The constituents having detection limits that exceeded the industrial RBCs and were not detected in any sample could be sorted into two groups:
 - 1) In the first group, the constituents had industrial RBCs that were generally less than 0.1 mg/kg, and the detection limits for all samples were greater than the industrial RBCs. Some samples had detection limits for SVOCs that were 10-times greater than method detection limits. However, these samples were diluted 10-times during analysis to quantify detected constituents that were less than the industrial RBCs. In this case, the detection limits appear reasonable and are unlikely to mask significant concentrations of these constituents.
 - 2) In the second group, the constituents had detection limits that were greater than the industrial RBCs in several samples where the detection limits for SVOCs were 10-times greater than the method detection limits. These samples were diluted in order to quantify the concentration of detected organic constituents. In this case, the detection limits appear reasonable and are unlikely to mask significant concentrations of these constituents.

- The constituents having detection limits that exceeded the site-specific SSLs and were not detected in any sample could be classified in the same way as those with detection limits that exceeded the industrial RBCs as described above.

4.6.4 Discussions with USEPA

USEPA and Bayer discussed the status and appropriate action for SWMU 13 on March 10, 1999. The discussion concluded, based on the Phase 2 results, that no further actions are warranted at this SWMU. Although no further action is warranted, it was decided that excavation in the vicinity of boring SM013-TB02 be subject to institutional controls to ensure worker safety.

4.6.5 Conclusions and Recommendations

The only constituent with a maximum detection that exceeds the industrial RBC was benzo(b)fluoranthene which was detected in one surface sample and is a component of the asphalt which covered the SWMU. Therefore, there is no concern related to the soil contact pathways.

Comparison of the soil analytical data to the site-specific SSLs indicates that only chlorobenzene, 2,6-dinitrotoluene, nitrobenzene, and p-chloroaniline were detected above the site-specific criteria. These constituents were present in only one sample (SM013-TB02-1113) with concentrations that exceed the site-specific SSLs. Therefore, there is little concern related to migration of detected constituents from soil to groundwater at this SWMU. All detection limits for undetected constituents are considered reasonable and are not likely to mask significant concentrations of any constituents.

Based on this information, Bayer and USEPA concurred that no further action is warranted for SWMU 13 and that excavation activities in the vicinity of boring SM013-TB02 will be included in an institutional control plan to ensure worker safety.

LE 4.6-1
Soil Analytical Results for SWMU 13: Existing Process Trench

SAMPLE ID	SM013-TB01-0001	SM013-TB01-0305	SM013-TB01-2023	SM013-TB02-0001	SM013-TB02-0001R	SM013-TB02-0305	SM013-TB02-0507	SM013-TB02-1113	SM013-TB02-1113R
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	20.00-23.00	0.00-1.00	0.00-1.00	3.00-5.00	5.00-7.00	11.00-13.00	11.00-13.00
SAMPLE LOCATION	TB01	TB01	TB01	TB02	TB02	TB02	TB02	TB02	TB02
SAMPLE DATE	6/24/1997	6/24/1997	6/24/1997	6/26/1997	2/24/1998	6/26/1997	7/15/1997	6/26/1997	2/24/1998
PARAMETER									
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
1,1,1-Trichloroethane	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
1,1,2,2-Tetrachloroethane	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
1,1,2-Trichloroethane	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
1,1-Dichloroethane	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
1,1-Dichloroethene	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
1,1-Dichloropropene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
1,2,3-Trichlorobenzene (VOAS)	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
1,2,3-Trichloropropane	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
1,2,4-Trichlorobenzene (VOAS)	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
1,2,4-Trimethylbenzene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
1,2-Dibromo-3-chloropropane	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
1,2-Dibromoethane	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
1,2-Dichlorobenzene (VOAS)	< 265	< 299	301 J	< 278	NA	< 284	< 292	2760	NA
1,2-Dichloroethane	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
1,2-Dichloropropane	< 403	< 455	< 440	< 423	NA	< 432	< 444	< 861	NA
1,3,5-Trimethylbenzene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
1,3-Dichlorobenzene (VOAS)	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
1,3-Dichloropropane	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
1,4-Dichlorobenzene (VOAS)	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
2,2-Dichloropropane	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
2-Butanone	< 932	< 1050	< 1020	< 980	NA	< 1000	< 1030	< 2070	NA
2-Chloroethyl Vinyl Ether	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
2-Chlorotoluene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
2-Hexanone	< 403	< 455	< 440	< 423	NA	< 432	< 444	< 861	NA
4-Chlorotoluene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
4-Methyl-2-pentanone	< 403	< 455	< 440	< 423	NA	< 432	< 444	< 861	NA
Acetone	< 932	< 1050	< 1020	< 980	NA	< 1000	< 1030	< 2070	NA
Acrolein	< 2650	< 2990	< 2900	< 2780	NA	< 2840	< 2920	< 5740	NA
Acrylonitrile	< 1380	< 1560	< 1510	< 1450	NA	< 1480	< 1520	< 2870	NA
Allyl Chloride	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Benzene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Bromobenzene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Bromochloromethane	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Bromodichloromethane	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
Bromoform	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Bromomethane	< 403	< 455	< 440	< 423	NA	< 432	< 444	< 861	NA
Carbon Disulfide	< 403	< 455	< 440	< 423	NA	< 432	< 444	< 861	NA
Carbon Tetrachloride	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Chlorobenzene	191 J	< 156	985	< 145	NA	< 148	< 152	138000	NA
Chloroethane	< 403	< 455	< 440	< 423	NA	< 432	< 444	< 861	NA
Chloroform	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA

TABLE 4.6-1
Soil Analytical Results for SWMU 13: Existing Process Trench

SAMPLE ID	SM013-TB01-0001	SM013-TB01-0305	SM013-TB01-2023	SM013-TB02-0001	SM013-TB02-0001R	SM013-TB02-0305	SM013-TB02-0507	SM013-TB02-1113	SM013-TB02-1113R
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	20.00-23.00	0.00-1.00	0.00-1.00	3.00-5.00	5.00-7.00	11.00-13.00	11.00-13.00
SAMPLE LOCATION	TB01	TB01	TB01	TB02	TB02	TB02	TB02	TB02	TB02
SAMPLE DATE	6/24/1997	6/24/1997	6/24/1997	6/26/1997	2/24/1998	6/26/1997	7/15/1997	6/26/1997	2/24/1998
PARAMETER									
Chloromethane	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
Dibromochloromethane	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Dibromomethane	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Dichlorodifluoromethane	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
Ethyl Methacrylate	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Ethylbenzene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Freon 113	< 265	< 299	440 J	1890	NA	819 J	< 292	654 JB	NA
Freon 141b	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Hexachlorobutadiene (VOAS)	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
Isopropylbenzene	< 403	< 455	< 440	< 423	NA	< 432	< 444	< 861	NA
Methyl Iodide	< 403	< 455	< 440	< 423	NA	< 432	< 444	< 861	NA
Methylene Chloride	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
Naphthalene (VOAS)	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Styrene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Tetrachloroethene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Toluene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Trichloroethene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
Trichlorofluoromethane	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
Vinyl Acetate	< 403	< 455	< 440	< 423	NA	< 432	< 444	< 861	NA
Vinyl Chloride	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
cis-1,2-Dichloroethene	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
cis-1,3-Dichloropropene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
m+p-Xylene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
n-Butylbenzene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
n-Propylbenzene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
o-Xylene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
p-Isopropyltoluene	< 138	< 156	< 151	< 145	NA	< 148	< 152	758 J	NA
sec-Butylbenzene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
tert-Butylbenzene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
trans-1,2-Dichloroethene	< 265	< 299	< 290	< 278	NA	< 284	< 292	< 574	NA
trans-1,3-Dichloropropene	< 138	< 156	< 151	< 145	NA	< 148	< 152	< 287	NA
trans-1,4-Dichloro-2-butene	< 1380	< 1560	< 1510	< 1450	NA	< 1480	< 1520	< 2870	NA
Semivolatiles (µg/kg)									
1,2,3-Trichlorobenzene (SVOA)	< 2540	< 290	< 280	R	< 2814	< 2730	NA	R	< 2727
1,2,4,5-Tetrachlorobenzene	< 2540	< 290	< 280	R	< 2814	< 2730	NA	R	< 2727
1,2,4-Trichlorobenzene (SVOA)	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
1,2-Dichlorobenzene (SVOA)	< 2120	< 240	680	R	< 2345	< 2280	NA	R	4182
1,3-Dichlorobenzene (SVOA)	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
1,4-Dichlorobenzene (SVOA)	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
1-Chloronaphthalene	< 5300	< 600	< 580	R	< 5862	< 5690	NA	R	< 5682
1-Methylnaphthalene	< 2120	1520	< 230	R	< 2345	< 2280	NA	R	< 2273
1-Naphthylamine	< 7200	< 810	< 790	R	< 7972	< 7740	NA	R	< 7727

LE 4.6-1
Soil Analytical Results MU 13: Existing Process Trench

PARAMETER	SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM013-TB01-0001 0.00-1.00 TB01 6/24/1997	SM013-TB01-0305 3.00-5.00 TB01 6/24/1997	SM013-TB01-2023 20.00-23.00 TB01 6/24/1997	SM013-TB02-0001 0.00-1.00 TB02 6/26/1997	SM013-TB02-0001R 0.00-1.00 TB02 2/24/1998	SM013-TB02-0305 3.00-5.00 TB02 6/26/1997	SM013-TB02-0507 5.00-7.00 TB02 7/15/1997	SM013-TB02-1113 11.00-13.00 TB02 6/26/1997	SM013-TB02-1113R 11.00-13.00 TB02 2/24/1998
2,3,4,6-Tetrachlorophenol	< 4240	< 480	< 460	R	< 4689	< 4550	NA	R	< 4545	
2,3-Dichloroaniline	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
2,4,5-Trichlorophenol	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
2,4,6-Trichlorophenol	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
2,4-Dichlorophenol	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
2,4-Dimethylphenol	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
2,4-Dinitrophenol	< 13100	< 1480	< 1440	R	< 14536	< 14100	NA	R	< 14090	
2,4-Dinitrotoluene	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
2,4-Toluenediamine	< 10600	< 1200	< 1160	R	< 11723	< 11400	NA	R	< 11363	
2,6-Dichlorophenol	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
2,6-Dinitrotoluene	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
2-Chloronaphthalene	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
2-Chlorophenol	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
2-Methylnaphthalene	< 2120 J	2310 J	260 J	R	< 2345	< 2280 J	NA	R	< 2273	
2-Naphthylamine	< 8050	< 910	< 880	R	< 8910	< 8650	NA	R	< 8636	
2-Nitroaniline	< 2540	< 290	< 280	R	< 2814	< 2730	NA	R	< 2727	
2-Nitrodiphenylamine	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
2-Nitrophenol	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
2-Picoline	< 7840	< 890	< 860	R	< 8675	< 8420	NA	R	< 8409	
3,3'-Dichlorobenzidine	< 12900	< 1460	< 1410	R	< 14302	< 13900	NA	R	< 13863	
3-Methylcholanthrene	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
3-Nitroaniline	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
4,4' Methyleneedianiline	< 18600	< 2110	< 2040	R	< 20633	< 20000	NA	R	< 20000	
4,6-Dinitro-o-cresol	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
4-Aminobiphenyl	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
4-Aminodiphenylamine	< 5300	< 600	< 580	R	< 5862	< 5690	NA	R	< 5682	
4-Bromophenyl phenyl ether	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
4-Chloro-m-cresol	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
4-Chlorophenylphenyl ether	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
4-Nitroaniline	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
4-Nitrophenol	< 2120 J	< 240 J	< 230 J	R	< 2345	< 2280 J	NA	R	< 2273	
5-Nitro-o-toluidine	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
7,12-dimethylbenz[a]anthracene	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
Acenaphthene	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
Acenaphthylene	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
Acetophenone	< 2750	< 310	< 300	R	< 3048	< 2960	NA	R	< 2955	
Aniline	< 2970	< 330	< 320	R	< 3283	< 3190	NA	R	3841	
Anthracene	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	
Azobenzene	< 2540	< 290	< 280	R	< 2814	< 2730	NA	R	< 2727	
Benzidine	< 33900	< 3830	< 3710	R	< 37514 J	< 36400	NA	R	< 36363 J	
Benzo(a)anthracene	< 2750	< 310	< 300	R	< 3048	< 2960	NA	R	< 2955	
Benzo(a)pyrene	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273	

TABLE 4.6-1
Soil Analytical Results for SWMU 13: Existing Process Trench

SAMPLE ID	SM013-TB01-0001	SM013-TB01-0305	SM013-TB01-2023	SM013-TB02-0001	SM013-TB02-0001R	SM013-TB02-0305	SM013-TB02-0507	SM013-TB02-1113	SM013-TB02-1113R
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	20.00-23.00	0.00-1.00	0.00-1.00	3.00-5.00	5.00-7.00	11.00-13.00	11.00-13.00
SAMPLE LOCATION	TB01	TB01	TB01	TB02	TB02	TB02	TB02	TB02	TB02
SAMPLE DATE	6/24/1997	6/24/1997	6/24/1997	6/26/1997	2/24/1998	6/26/1997	7/15/1997	6/26/1997	2/24/1998
PARAMETER									
Benzo(b)fluoranthene	< 2120	< 240	< 230	9760 J	< 2345	< 2280	NA	R	< 2273
Benzo(ghi)perylene	< 2330	< 260	< 250	6950 J	< 2579	< 2500	NA	R	< 2500
Benzo(k)fluoranthene	< 2120	< 240	< 230	8730 J	< 2345	< 2280	NA	R	< 2273
Benzoic Acid	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Benzyl Alcohol	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Benzyl butyl phthalate	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Bis(2-chloroethoxyethane)	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Bis(2-chloroethyl)ether	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Bis(2-chloroisopropyl)ether	< 2120	< 240	< 230	R	< 2345 J	< 2280	NA	R	< 2273 J
Bis(2-ethylhexyl) phthalate	< 2540	1020 B	430 B	R	< 2814 J	< 2730	NA	R	< 2727 J
Bisphenol A	< 3810	< 430	560	R	28604 J	< 4100	NA	R	195450 J
Carbazole	< 10600	< 1200	< 1160	R	< 11723	< 11400	NA	R	< 11363
Chrysene	< 2120	< 240	< 230	5970 J	< 2345	< 2280	NA	R	< 2273
Cyclohexanone	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Di-n-butyl phthalate	< 2120 J	880 JB	510 JB	R	< 2345	8050 JB	NA	R	< 2273
Di-n-octyl phthalate	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Dibenzo(a,h)anthracene	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Dibenzofuran	< 2120	610	< 230	R	< 2345	< 2280	NA	R	< 2273
Diethyl Phthalate	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Dimethylphthalate	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Ethyl Methane Sulfonate	< 3810	< 430	< 420	R	< 4220	< 4100	NA	R	< 4091
Fluoranthene	< 2120 J	< 240 J	< 230 J	R	< 2345	< 2280 J	NA	R	< 2273
Fluorene	< 2120 J	< 240 J	< 230 J	R	< 2345	< 2280 J	NA	R	< 2273
Heptachlor	< 2330	< 260	< 250	R	< 2579	< 2500	NA	R	< 2500
Hexachlorobenzene	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Hexachlorobutadiene (SVOA)	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Hexachlorocyclopentadiene	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Hexachloroethane	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Indeno(1,2,3-cd)pyrene	< 2120	< 240	< 230	6280 J	< 2345	< 2280	NA	R	< 2273
Isophorone	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Methyl methane sulfonate	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
N-Nitrosodibutylamine	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
N-Nitrosodimethylamine	< 2120 J	< 240 J	< 230 J	R	< 2345	< 2280 J	NA	R	< 2273
N-Nitrosodiphenylamine	< 2750	< 310	< 300	R	< 3048	< 2960	NA	R	< 2955
N-Nitrosodipropylamine	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
N-Nitrosopiperidine	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Naphthalene (SVOA)	< 2120 J	2090 J	< 230 J	R	< 2345	< 2280 J	NA	R	< 2273
Nitrobenzene	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Pentachlorobenzene	< 3600	< 410	< 390	R	< 3986	< 3870	NA	R	< 3864
Pentachloronitrobenzene	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Pentachlorophenol	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273
Phenacetin	< 2120	< 240	< 230	R	< 2345	< 2280	NA	R	< 2273

Soil Analytical Results
VMU 13: Existing Process Trench

SAMPLE ID	SM013-TB01-0001	SM013-TB01-0305	SM013-TB01-2023	SM013-TB02-0001	SM013-TB02-0001R	SM013-TB02-0305	SM013-TB02-0507	SM013-TB02-1113	SM013-TB02-1113R
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	20.00-23.00	0.00-1.00	0.00-1.00	3.00-5.00	5.00-7.00	11.00-13.00	11.00-13.00
SAMPLE LOCATION	TB01	TB01	TB01	TB02	TB02	TB02	TB02	TB02	TB02
SAMPLE DATE	6/24/1997	6/24/1997	6/24/1997	6/26/1997	2/24/1998	6/26/1997	7/15/1997	6/26/1997	2/24/1998
PARAMETER									
Phenanthrene	<2120	710	270	R	<2345	<2280	NA	R	<2273
Phenol	<1270	<140	<140	R	<1407	<1370	NA	R	4182
Pyrene	<2120 J	<240 J	<230 J	14500 J	<2345	<2280 J	NA	R	<2273
Pyridine	<2330	<260	<250	R	<2579	<2500	NA	R	<2500
Trimethylphosphate	<2120	<240	<230	R	<2345	<2280	NA	R	<2273
Triphenylphosphate	<10600	<1200	<1160	R	<11723	<11400	NA	R	<11363
m,p-Cresol	<3180	<360	<350	R	<3517	<3410	NA	R	<3409
m-Nitrotoluene	<2120	<240	<230	R	<2345	<2280	NA	R	<2273
m-Tolidine	<4240	<480	<460	R	<4689	<4550	NA	R	<4545
o,p-Tolidine	<10800	<1220	<1180	R	<11957	<11600	NA	R	<11590
o-Cresol	<2120	<240	<230	R	<2345	<2280	NA	R	<2273
o-Nitrotoluene	<2120	<240	<230	R	<2345	<2280	NA	R	<2273
p-Chloroaniline	<2120	<240	<230	R	<2345	<2280	NA	R	41363
p-Dimethylaminoazobenzene	<2120	<240	<230	R	<2345	<2280	NA	R	<2273
p-Nitrotoluene	<3180	<360	<350	R	<3517	<3410	NA	R	<3409
Metals (µg/kg)									
Antimony	NA	<478	<464	<445	NA	<455	<468	<459	NA
Cadmium	NA	<480	<460	<450	NA	1230	<470	1310	NA
Chromium	NA	15000	<350	6750	NA	23700	15800	14400	NA
Lead	NA	18500	155 J	10500	NA	18400	13100	15800	NA
Nickel	NA	28200	<460	8020	NA	32100	21900	207000	NA
Miscellaneous (µg/kg)									
Percent Moisture	5.6 %	16 %	14 %	10 %	15 %	12 %	15 %	13 %	12 %
Total Organic Carbon	3300000 J	NA	NA	NA	NA	NA	1900000	NA	NA

B=Blank Contamination

J-Estimated Value

NA=Not Analyzed

R=Data Rejected for Quality Reasons

TABLE 4.6-1
Soil Analytical Results for SWMU 13: Existing Process Trench

SAMPLE ID	SM013-TB02-1517	SM013-TB02-1517R	SM013-TB03-0001	SM013-TB03-0001R	SM013-TB03-0305	SM013-TB03-0305F	SM013-TB03-1618	SM013-TB04-0001	SM013-TB04-0305
SAMPLE DEPTH(ft)	15.00-17.00	15.00-17.00	0.00-1.00	0.00-1.00	3.00-5.00	3.00-5.00	16.00-18.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB02	TB02	TB03	TB03	TB03	TB03	TB03	TB04	TB04
SAMPLE DATE	6/26/1997	2/24/1998	7/2/1997	2/23/1998	7/2/1997	7/2/1997	7/2/1997	7/3/1997	7/3/1997
PARAMETER									
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
1,1,1-Trichloroethane	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
1,1,2,2-Tetrachloroethane	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
1,1,2-Trichloroethane	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
1,1-Dichloroethane	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
1,1-Dichloroethene	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
1,1-Dichloropropene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
1,2,3-Trichlorobenzene (VOAS)	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
1,2,3-Trichloropropane	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
1,2,4-Trichlorobenzene (VOAS)	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
1,2,4-Trimethylbenzene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
1,2-Dibromo-3-chloropropane	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
1,2-Dibromoethane	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
1,2-Dichlorobenzene (VOAS)	< 298	NA	< 269	NA	347 J	352 J	2190	268 J	< 291
1,2-Dichloroethane	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
1,2-Dichloropropane	< 452	NA	< 409	NA	< 470	< 461	< 439	< 407	< 442
1,3,5-Trimethylbenzene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
1,3-Dichlorobenzene (VOAS)	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
1,3-Dichloropropane	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
1,4-Dichlorobenzene (VOAS)	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
2,2-Dichloropropane	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
2-Butanone	< 1050	NA	< 948	NA	< 1090	< 1070	< 1020	< 942	< 1020
2-Chloroethyl Vinyl Ether	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
2-Chlorotoluene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
2-Hexanone	< 452	NA	< 409	NA	< 470	< 461	< 439	< 407	< 442
4-Chlorotoluene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
4-Methyl-2-pentanone	< 452	NA	< 409	NA	< 470	< 461	< 439	< 407	< 442
Acetone	< 1050	NA	< 948	NA	< 1090	< 1070	< 1020	< 942	< 1020
Acrolein	< 2980	NA	< 2690	NA	< 3090	< 3030	< 2890	< 2680	< 2910
Acrylonitrile	< 1550	NA	< 1400	NA	< 1610	< 1580	< 1500	< 1390	< 1510
Allyl Chloride	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Benzene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Bromobenzene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Bromochloromethane	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Bromodichloromethane	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
Bromoform	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Bromomethane	< 452	NA	< 409	NA	< 470	< 461	< 439	< 407	< 442
Carbon Disulfide	< 452	NA	< 409	NA	< 470	< 461	< 439	< 407	< 442
Carbon Tetrachloride	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Chlorobenzene	7260	NA	183 J	NA	< 161	< 158	2420	< 139	< 151
Chloroethane	< 452	NA	< 409	NA	< 470	< 461	< 439	< 407	< 442
Chloroform	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151

LE 4.6-1
Soil Analytical Results
MU 13: Existing Process Trench

SAMPLE ID	SM013-TB02-1517	SM013-TB02-1517R	SM013-TB03-0001	SM013-TB03-0001R	SM013-TB03-0305	SM013-TB03-0305F	SM013-TB03-1618	SM013-TB04-0001	SM013-TB04-0305
SAMPLE DEPTH(ft)	15.00-17.00	15.00-17.00	0.00-1.00	0.00-1.00	3.00-5.00	3.00-5.00	16.00-18.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB02	TB02	TB03	TB03	TB03	TB03	TB03	TB04	TB04
SAMPLE DATE	6/26/1997	2/24/1998	7/2/1997	2/23/1998	7/2/1997	7/2/1997	7/2/1997	7/3/1997	7/3/1997
PARAMETER									
Chloromethane	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
Dibromochloromethane	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Dibromomethane	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Dichlorodifluoromethane	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
Ethyl Methacrylate	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Ethylbenzene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Freon 113	1310 J	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
Freon 141b	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Hexachlorobutadiene (VOAS)	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
Isopropylbenzene	< 452	NA	< 409	NA	< 470	< 461	< 439	< 407	< 442
Methyl Iodide	< 452	NA	< 409	NA	< 470	< 461	< 439	< 407	< 442
Methylene Chloride	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
Naphthalene (VOAS)	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Styrene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Tetrachloroethene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Toluene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Trichloroethene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
Trichlorofluoromethane	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
Vinyl Acetate	< 452	NA	< 409	NA	< 470	< 461	< 439	< 407	< 442
Vinyl Chloride	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
cis-1,2-Dichloroethene	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
cis-1,3-Dichloropropene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
m+p-Xylene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
n-Butylbenzene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
n-Propylbenzene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
o-Xylene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
p-Isopropyltoluene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
sec-Butylbenzene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
tert-Butylbenzene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
trans-1,2-Dichloroethene	< 298	NA	< 269	NA	< 309	< 303	< 289	< 268	< 291
trans-1,3-Dichloropropene	< 155	NA	< 140	NA	< 161	< 158	< 150	< 139	< 151
trans-1,4-Dichloro-2-butene	< 1550	NA	< 1400	NA	< 1610	< 1580	< 1500	< 1390	< 1510
Semivolatiles ($\mu\text{g/kg}$)									
1,2,3-Trichlorobenzene (SVOA)	R	< 1456	< 260	< 260	< 300	< 290	< 280	< 510	< 280
1,2,4,5-Tetrachlorobenzene	R	< 1456	< 260	< 260	< 300	< 290	< 280	< 510	< 280
1,2,4-Trichlorobenzene (SVOA)	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
1,2-Dichlorobenzene (SVOA)	R	< 1214	1140	< 217	< 250	< 240	1020	830	< 230
1,3-Dichlorobenzene (SVOA)	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
1,4-Dichlorobenzene (SVOA)	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
1-Chloronaphthalene	R	< 3034	< 540	< 542	< 620	< 610	< 580	< 1070	< 580
1-Methylnaphthalene	R	< 1214	< 220	< 217	< 250	460	< 230	< 430	< 230
1-Naphthylamine	R	< 4126	< 730	< 738	< 840	< 820	< 790	< 1460	< 790

TABLE 4.6-1
Soil Analytical Results for SWMU 13: Existing Process Trench

SAMPLE ID	SM013-TB02-1517	SM013-TB02-1517R	SM013-TB03-0001	SM013-TB03-0001R	SM013-TB03-0305	SM013-TB03-0305F	SM013-TB03-1618	SM013-TB04-0001	SM013-TB04-0305
SAMPLE DEPTH(ft)	15.00-17.00	15.00-17.00	0.00-1.00	0.00-1.00	3.00-5.00	3.00-5.00	16.00-18.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB02	TB02	TB03	TB03	TB03	TB03	TB03	TB04	TB04
SAMPLE DATE	6/26/1997	2/24/1998	7/2/1997	2/23/1998	7/2/1997	7/2/1997	7/2/1997	7/3/1997	7/3/1997
PARAMETER									
2,3,4,6-Tetrachlorophenol	< 4760	< 2427	< 430	< 434	< 490	< 480	< 460	< 860	< 470
2,3-Dichloroaniline	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
2,4,5-Trichlorophenol	< 2380	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
2,4,6-Trichlorophenol	< 2380	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
2,4-Dichlorophenol	< 2380	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
2,4-Dimethylphenol	< 2380	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
2,4-Dinitrophenol	< 14800	< 7524	< 1340	< 1345	< 1530	< 1500	< 1430	< 2650	< 1440
2,4-Dinitrotoluene	R	< 1214	1070	< 217	< 250	< 240	< 230	< 430	< 230
2,4-Toluenediamine	R	< 6068	< 1080	< 1085	< 1240	< 1210	< 1150	< 2140	< 1160
2,6-Dichlorophenol	< 2380	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
2,6-Dinitrotoluene	R	< 1214	3770	< 217	< 250	< 240	< 230	< 430	< 230
2-Chloronaphthalene	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
2-Chlorophenol	< 2380	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
2-Methylnaphthalene	R	< 1214	240 J	< 217	< 250 J	710 J	< 230 J	< 430 J	< 230 J
2-Naphthylamine	R	< 4612	< 820	< 824	< 940	< 920	< 880	< 1630	< 880
2-Nitroaniline	R	< 1456	< 260	< 260	< 300	< 290	< 280	< 510	< 280
2-Nitrodiphenylamine	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
2-Nitrophenol	< 2380	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
2-Picoline	R	< 4490	< 800	< 803	< 920	< 900	< 850	< 1580	< 860
3,3'-Dichlorobenzidine	R	< 7403	< 1310	< 1323	< 1510	< 1480	< 1410	< 2610	< 1420
3-Methylcholanthrene	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
3-Nitroaniline	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
4,4'-Methylenedianiline	R	< 10679	12700	< 1909	< 2180	< 2130	< 2030	< 3770	< 2050
4,6-Dinitro-o-cresol	< 2380	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
4-Aminobiphenyl	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
4-Aminodiphenylamine	R	< 3034	< 540	< 542	< 620	< 610	< 580	< 1070	< 580
4-Bromophenyl phenyl ether	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
4-Chloro-m-cresol	< 2380	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
4-Chlorophenylphenyl ether	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
4-Nitroaniline	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
4-Nitrophenol	< 2380 J	< 1214	2150 J	< 217	< 250 J	< 240 J	< 230 J	< 430 J	< 230 J
5-Nitro-o-toluidine	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
7,12-dimethylbenz[a]anthracene	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Acenaphthene	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Acenaphthylene	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Acetophenone	R	< 1578	< 280	< 282	< 320	< 320	< 300	< 560	< 300
Aniline	16700 J	2427	5600	824	< 350	< 340	< 320	< 600	< 330
Anthracene	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Azobenzene	R	< 1456	< 260	< 260	< 300	< 290	< 280	< 510	< 280
Benzidine	R	< 19417 J	< 3450	< 3471 J	< 3960	< 3880	< 3700	< 6850	< 3720
Benzo(a)anthracene	R	< 1578	< 280	< 282	< 320	330	< 300	< 560	< 300
Benzo(a)pyrene	R	< 1214	240	< 217	< 250	270	< 230	< 430	< 230

LE 4.6-1
Soil Analytical Results for MU 13: Existing Process Trench

SAMPLE ID	SM013-TB02-1517	SM013-TB02-1517R	SM013-TB03-0001	SM013-TB03-0001R	SM013-TB03-0305	SM013-TB03-0305F	SM013-TB03-1618	SM013-TB04-0001	SM013-TB04-0305
SAMPLE DEPTH(ft)	15.00-17.00	15.00-17.00	0.00-1.00	0.00-1.00	3.00-5.00	3.00-5.00	16.00-18.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB02	TB02	TB03	TB03	TB03	TB03	TB03	TB04	TB04
SAMPLE DATE	6/26/1997	2/24/1998	7/2/1997	2/23/1998	7/2/1997	7/2/1997	7/2/1997	7/3/1997	7/3/1997
PARAMETER									
Benzo(b)fluoranthene	R	< 1214	< 220	< 217	< 250	390	< 230	< 430	< 230
Benzo(ghi)perylene	R	< 1335	< 240	< 239	< 270	< 270	< 250	< 470	< 260
Benzo(k)fluoranthene	R	< 1214	260	< 217	< 250	290	< 230	< 430	< 230
Benzoic Acid	< 2380	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Benzyl Alcohol	< 2380	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Benzyl butyl phthalate	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Bis(2-chloroethoxymethane)	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Bis(2-chloroethyl)ether	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Bis(2-chloroisopropyl)ether	R	< 1214 J	< 220	< 217 J	< 250	< 240	< 230	< 430	< 230
Bis(2-ethylhexyl) phthalate	R	< 1456 J	8700	1182 JB	< 300	430	330	< 510	< 280
Bisphenol A	4330 J	27669 J	3060	933 J	< 450	< 440	< 420	< 770	< 420
Carbazole	R	< 6068	< 1080	< 1085	< 1240	< 1210	< 1150	< 2140	< 1160
Chrysene	R	< 1214	< 220	< 217	< 250	370	< 230	< 430	< 230
Cyclohexanone	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Di-n-butyl phthalate	R	1602 B	1550 J	10001 B	290 J	1280 J	910 J	< 430 J	< 230 J
Di-n-octyl phthalate	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Dibenzo(a,h)anthracene	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Dibenzofuran	R	< 1214	< 220	< 217	< 250	240	< 230	< 430	< 230
Diethyl Phthalate	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Dimethylphthalate	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Ethyl Methane Sulfonate	R	< 2184	< 390	< 390	< 450	< 440	< 420	< 770	< 420
Fluoranthene	R	< 1214	< 220 J	< 217	< 250 J	570 J	< 230 J	< 430 J	< 230 J
Fluorene	R	< 1214	< 220 J	< 217	< 250 J	< 240 J	< 230 J	< 430 J	< 230 J
Heptachlor	R	< 1335	< 240	< 239	< 270	< 270	< 250	< 470	< 260
Hexachlorobenzene	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Hexachlorobutadiene (SVOA)	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Hexachlorocyclopentadiene	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Hexachloroethane	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Indeno(1,2,3-cd)pyrene	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Isophorone	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Methyl methane sulfonate	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
N-Nitrosodibutylamine	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
N-Nitrosodimethylamine	R	< 1214	< 220 J	< 217	< 250 J	< 240 J	< 230 J	< 430 J	< 230 J
N-Nitrosodiphenylamine	R	< 1578	< 280	< 282	< 320	< 320	< 300	< 560	< 300
N-Nitrosodipropylamine	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
N-Nitrosopiperidine	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Naphthalene (SVOA)	R	< 1214	< 220 J	< 217	< 250 J	880 J	< 230 J	< 430 J	< 230 J
Nitrobenzene	R	73907	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Pentachlorobenzene	R	< 2063	< 370	< 369	< 420	< 410	< 390	< 730	< 400
Pentachloronitrobenzene	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Pentachlorophenol	< 2380	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Phenacetin	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230

TABLE 4.6-1
Soil Analytical Results for SWMU 13: Existing Process Trench

SAMPLE ID	SM013-TB02-1517	SM013-TB02-1517R	SM013-TB03-0001	SM013-TB03-0001R	SM013-TB03-0305	SM013-TB03-0305F	SM013-TB03-1618	SM013-TB04-0001	SM013-TB04-0305
SAMPLE DEPTH(ft)	15.00-17.00	15.00-17.00	0.00-1.00	0.00-1.00	3.00-5.00	3.00-5.00	16.00-18.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB02	TB02	TB03	TB03	TB03	TB03	TB03	TB04	TB04
SAMPLE DATE	6/26/1997	2/24/1998	7/2/1997	2/23/1998	7/2/1997	7/2/1997	7/2/1997	7/3/1997	7/3/1997
PARAMETER									
Phenanthrene	R	< 1214	350	< 217	< 250	430	< 230	< 430	< 230
Phenol	< 1430	< 728	5490	2712	< 150	< 150	< 140	900	< 140
Pyrene	R	< 1214	280 J	< 217	< 250 J	570 J	< 230 J	< 430 J	< 230 J
Pyridine	R	< 1335	< 240	< 239	< 270	< 270	< 250	< 470	< 260
Trimethylphosphate	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
Triphenylphosphate	R	< 6068	< 1080	< 1085	< 1240	< 1210	< 1150	< 2140	< 1160
m,p-Cresol	< 3570	< 1820	< 320	< 325	< 370	< 360	< 350	< 640	< 350
m-Nitrotoluene	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
m-Toluidine	R	< 2427	< 430	< 434	< 490	< 480	< 460	< 860	< 470
o,p-Toluidine	R	< 6189	< 1100	< 1106	< 1260	< 1240	< 1180	< 2180	< 1190
o-Cresol	< 2380	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
o-Nitrotoluene	R	< 1214	370	< 217	< 250	< 240	< 230	< 430	< 230
p-Chloroaniline	R	< 1214	1980	243	< 250	< 240	< 230	690	< 230
p-Dimethylaminoazobenzene	R	< 1214	< 220	< 217	< 250	< 240	< 230	< 430	< 230
p-Nitrotoluene	R	< 1820	400	< 325	< 370	< 360	< 350	< 640	< 350
Metals (µg/kg)									
Antimony	< 476	NA	< 431	NA	< 495	< 485	< 462	< 428	< 465
Cadmium	< 480	NA	1060	NA	900	800	< 460	630	880
Chromium	18700	NA	35900	NA	16000	16500	10600	14800	17900
Lead	15300	NA	37700	NA	19100	18400	12000	17500	15000
Nickel	24100	NA	45700	NA	26900	24600	11600	70300	23100
Miscellaneous (µg/kg)									
Percent Moisture	16 %	18 %	7.1 %	NA	7.8 %	19 %	18 %	13 %	6.6 %
Total Organic Carbon	NA	NA	NA	NA	NA	NA	NA	8700000	14 %
								NA	NA

B=Blank Contamination

J=Estimated Value

NA=Not Analyzed

R=Data Rejected for Quality Reasons

LE 4.6-1
Soil Analytical Results MU 13: Existing Process Trench

SAMPLE ID	SM013-TB04-1113	SM013-TB04-1617	SM013-TB05-0001	SM013-TB05-0305	SM013-TB05-1719	SM013-TB06-0001	SM013-TB06-0305	SM013-TB06-1214	SM013-TB07-0001
SAMPLE DEPTH(ft)	11.00-13.00	16.00-17.00	0.00-1.00	3.00-5.00	17.00-19.00	0.00-1.00	3.00-5.00	12.00-14.00	0.00-1.00
SAMPLE LOCATION	TB04	TB04	TB05	TB05	TB05	TB06	TB06	TB06	TB07
SAMPLE DATE	7/3/1997	7/3/1997	7/8/1997	7/8/1997	7/8/1997	7/14/1997	7/14/1997	7/14/1997	7/14/1997
PARAMETER									
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
1,1,1-Trichloroethane	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
1,1,2,2-Tetrachloroethane	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
1,1,2-Trichloroethane	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
1,1-Dichloroethane	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
1,1-Dichloroethene	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
1,1-Dichloropropene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
1,2,3-Trichlorobenzene (VOAS)	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
1,2,3-Trichloropropane	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
1,2,4-Trichlorobenzene (VOAS)	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
1,2,4-Trimethylbenzene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
1,2-Dibromo-3-chloropropane	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
1,2-Dibromoethane	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
1,2-Dichlorobenzene (VOAS)	< 299	333 J	913	< 292	1890	< 293	< 305	< 306	< 294
1,2-Dichloroethane	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
1,2-Dichloropropane	< 455	< 452	< 403	< 443	< 449	< 445	< 463	< 466	< 447
1,3,5-Trimethylbenzene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
1,3-Dichlorobenzene (VOAS)	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
1,3-Dichloropropane	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
1,4-Dichlorobenzene (VOAS)	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
2,2-Dichloropropane	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
2-Butanone	< 1050	< 1050	< 934	< 1030	< 1040	< 1030	< 1070	< 1080	< 1040
2-Chloroethyl Vinyl Ether	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
2-Chlorotoluene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
2-Hexanone	< 455	< 452	< 403	< 443	< 449	< 445	< 463	< 466	< 447
4-Chlorotoluene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
4-Methyl-2-pentanone	< 455	< 452	< 403	< 443	< 449	< 445	< 463	< 466	< 447
Acetone	< 1050	< 1050	< 934	< 1030	< 1040	< 1030	< 1070	< 1080	< 1040
Acrolein	< 2990	< 2970	< 2650	< 2920	< 2950	< 2930	< 3050	< 3060	< 2940
Acrylonitrile	< 1560	< 1550	< 1380	< 1520	< 1530	< 1520	< 1590	< 1590	< 1530
Allyl Chloride	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
Benzene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
Bromobenzene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
Bromochloromethane	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
Bromodichloromethane	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
Bromoform	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
Bromomethane	< 455	< 452	< 403	< 443	< 449	< 445	< 463	< 466	< 447
Carbon Disulfide	< 455	< 452	< 403	< 443	< 449	< 445	< 463	< 466	< 447
Carbon Tetrachloride	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
Chlorobenzene	< 156	2850	159 J	< 152	< 153	< 152	< 159	< 159	153 J
Chloroethane	< 455	< 452	< 403	< 443	< 449	< 445	< 463	< 466	< 447
Chloroform	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153

TABLE 4.6-1
Soil Analytical Results for SWMU 13: Existing Process Trench

SAMPLE ID	SM013-TB04-1113	SM013-TB04-1617	SM013-TB05-0001	SM013-TB05-0305	SM013-TB05-1719	SM013-TB06-0001	SM013-TB06-0305	SM013-TB06-1214	SM013-TB07-0001
SAMPLE DEPTH(ft)	11.00-13.00	16.00-17.00	0.00-1.00	3.00-5.00	17.00-19.00	0.00-1.00	3.00-5.00	12.00-14.00	0.00-1.00
SAMPLE LOCATION	TB04	TB04	TB05	TB05	TB05	TB06	TB06	TB06	TB07
SAMPLE DATE	7/3/1997	7/3/1997	7/8/1997	7/8/1997	7/8/1997	7/14/1997	7/14/1997	7/14/1997	7/14/1997
PARAMETER									
Chloromethane	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
Dibromochloromethane	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
Dibromomethane	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
Dichlorodifluoromethane	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
Ethyl Methacrylate	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
Ethylbenzene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
Freon 113	1440 J	< 297	1010 J	< 292	< 295	586 J	561 J	1470 J	624 J
Freon 141b	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
Hexachlorobutadiene (VOAS)	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
Isopropylbenzene	< 455	< 452	< 403	< 443	< 449	< 445	< 463	< 466	< 447
Methyl Iodide	< 455	< 452	< 403	< 443	< 449	< 445	< 463	< 466	< 447
Methylene Chloride	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
Naphthalene (VOAS)	< 156	< 155	159 J	< 152	< 153	< 152	< 159	< 159	< 153
Styrene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
Tetrachloroethene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
Toluene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	16500
Trichloroethene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
Trichlorofluoromethane	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
Vinyl Acetate	< 455	< 452	< 403	< 443	< 449	< 445	< 463	< 466	< 447
Vinyl Chloride	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
cis-1,2-Dichloroethene	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
cis-1,3-Dichloropropene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
m+p-Xylene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
n-Butylbenzene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
n-Propylbenzene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
o-Xylene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
p-Isopropyltoluene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
sec-Butylbenzene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
tert-Butylbenzene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
trans-1,2-Dichloroethene	< 299	< 297	< 265	< 292	< 295	< 293	< 305	< 306	< 294
trans-1,3-Dichloropropene	< 156	< 155	< 138	< 152	< 153	< 152	< 159	< 159	< 153
trans-1,4-Dichloro-2-butene	< 1560	< 1550	< 1380	< 1520	< 1530	< 1520	< 1590	< 1590	< 1530
Semivolatiles (µg/kg)									
1,2,3-Trichlorobenzene (SVOA)	< 290	< 290	< 2550	< 280	< 280	< 280	< 290	< 290	< 280
1,2,4,5-Tetrachlorobenzene	< 290	< 290	< 2550	< 280	< 280	< 280	< 290	< 290	< 280
1,2,4-Trichlorobenzene (SVOA)	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
1,2-Dichlorobenzene (SVOA)	310	1090	< 2120	< 230	4750	< 230	< 240	< 250	< 240
1,3-Dichlorobenzene (SVOA)	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
1,4-Dichlorobenzene (SVOA)	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
1-Chloronaphthalene	< 600	< 590	< 5310	< 580	< 590	< 590	< 610	< 610	< 590
1-Methylnaphthalene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
1-Naphthylamine	< 810	< 810	< 7220	< 790	< 800	< 800	< 830	< 830	< 800

E 4.6-1
Soil Analytical Results MU 13: Existing Process Trench

SAMPLE ID	SM013-TB04-1113	SM013-TB04-1617	SM013-TB05-0001	SM013-TB05-0305	SM013-TB05-1719	SM013-TB06-0001	SM013-TB06-0305	SM013-TB06-1214	SM013-TB07-0001
SAMPLE DEPTH(ft)	11.00-13.00	16.00-17.00	0.00-1.00	3.00-5.00	17.00-19.00	0.00-1.00	3.00-5.00	12.00-14.00	0.00-1.00
SAMPLE LOCATION	TB04	TB04	TB05	TB05	TB05	TB06	TB06	TB06	TB07
SAMPLE DATE	7/3/1997	7/3/1997	7/8/1997	7/8/1997	7/8/1997	7/14/1997	7/14/1997	7/14/1997	7/14/1997
PARAMETER									
2,3,4,6-Tetrachlorophenol	< 480	< 480	< 4240	< 470	< 470	< 470	< 490	< 490	< 470
2,3-Dichloroaniline	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
2,4,5-Trichlorophenol	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
2,4,6-Trichlorophenol	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
2,4-Dichlorophenol	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
2,4-Dimethylphenol	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
2,4-Dinitrophenol	< 1490	< 1470	< 13200	< 1450	< 1460	< 1450	< 1510	< 1520	< 1460
2,4-Dinitrotoluene	< 240	< 240	< 2120	240	810	< 230	< 240	< 250	< 240
2,4-Toluenediamine	< 1200	< 1190	< 10600	< 1170	< 1180	< 1170	< 1220	< 1230	< 1180
2,6-Dichlorophenol	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
2,6-Dinitrotoluene	< 240	< 240	< 2120	< 230	6380	< 230	< 240	< 250	< 240
2-Chloronaphthalene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
2-Chlorophenol	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
2-Methylnaphthalene	< 240 J	< 240 J	< 2120 J	< 230 J	< 240 J	< 230 J	< 240 J	< 250 J	< 240 J
2-Naphthylamine	< 910	< 900	< 8070	< 890	< 900	< 890	< 930	< 930	< 890
2-Nitroaniline	< 290	< 290	< 2550	< 280	< 280	< 280	< 290	< 290	< 280
2-Nitrodiphenylamine	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
2-Nitrophenol	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
2-Picoline	< 890	< 880	< 7850	< 860	< 870	< 870	< 900	< 910	< 870
3,3'-Dichlorobenzidine	< 1460	< 1450	< 13000	< 1420	< 1440	< 1430	< 1490	< 1500	< 1440
3-Methylcholanthrene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
3-Nitroaniline	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
4,4' Methyleneedianiline	< 2110	< 2090	< 18700	< 2050	< 2080	R	< 2150	< 2160	< 2070
4,6-Dinitro-o-cresol	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
4-Aminobiphenyl	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
4-Aminodiphenylamine	< 600	< 590	< 5310	< 580	< 590	< 590	< 610	< 610	< 590
4-Bromophenyl phenyl ether	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
4-Chloro-m-cresol	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
4-Chlorophenylphenyl ether	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
4-Nitroaniline	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
4-Nitrophenol	< 240 J	< 240 J	< 2120 J	< 230 J	< 240 J	< 230 J	< 240 J	< 250 J	< 240 J
5-Nitro-o-toluidine	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	420	< 240
7,12-dimethylbenz[a]anthracene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Acenaphthene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Acenaphthylene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Acetophenone	< 310	< 310	< 2760	< 300	< 310	< 300	< 320	< 320	< 310
Aniline	< 340	< 330	< 2970	< 330	< 330	< 330	< 340	< 340	< 330
Anthracene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Azobenzene	< 290	< 290	< 2550	< 280	< 280	< 280	< 290	< 290	< 280
Benzidine	< 3830	< 3810	< 34000	< 3730	< 3780	< 3750	< 3900	< 3920	< 3760
Benzo(a)anthracene	< 310	< 310	< 2760	< 300	< 310	< 300	< 320	< 320	< 310
Benzo(a)pyrene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240

TABLE 4.6-1
Soil Analytical Results for SWMU 13: Existing Process Trench

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE PARAMETER	SM013-TB04-1113 11.00-13.00 TB04 7/3/1997	SM013-TB04-1617 16.00-17.00 TB04 7/3/1997	SM013-TB05-0001 0.00-1.00 TB05 7/8/1997	SM013-TB05-0305 3.00-5.00 TB05 7/8/1997	SM013-TB05-1719 17.00-19.00 TB05 7/8/1997	SM013-TB06-0001 0.00-1.00 TB06 7/14/1997	SM013-TB06-0305 3.00-5.00 TB06 7/14/1997	SM013-TB06-1214 12.00-14.00 TB06 7/14/1997	SM013-TB07-0001 0.00-1.00 TB07 7/14/1997
Benzo(b)fluoranthene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Benzo(ghi)perylene	< 260	< 260	< 2330	< 260	< 260	< 260	< 270	< 270	< 260
Benzo(k)fluoranthene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Benzoic Acid	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Benzyl Alcohol	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Benzyl butyl phthalate	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Bis(2-chloroethoxy methane)	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Bis(2-chloroethyl)ether	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Bis(2-chloroisopropyl)ether	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Bis(2-ethylhexyl) phthalate	480 B	390	< 2550	340 B	520	350 B	< 290	300	360 B
Bisphenol A	< 430	< 430	< 3820	< 420	< 420	< 420	< 440	< 440	< 420
Carbazole	< 1200	< 1190	< 10600	< 1170	< 1180	< 1170	< 1220	< 1230	< 1180
Chrysene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Cyclohexanone	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Di-n-butyl phthalate	780 JB	7020 JB	13800 J	4990 JB	9300 JB	680 JB	2280 JB	1910 JB	1440 JB
Di-n-octyl phthalate	< 240	< 240	< 2120	< 230	< 240	330	< 240	< 250	< 240
Dibenzo(a,h)anthracene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Dibenzofuran	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Diethyl Phthalate	< 240	< 240	< 2120	< 230	260	< 230	< 240	< 250	< 240
Dimethylphthalate	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Ethyl Methane Sulfonate	< 430	< 430	< 3820	< 420	< 420	< 420	< 440	< 440	< 420
Fluoranthene	< 240 J	< 240 J	< 2120 J	< 230 J	< 240 J	< 230 J	< 240 J	< 250 J	< 240 J
Fluorene	< 240 J	< 240 J	< 2120 J	< 230 J	< 240 J	< 230 J	< 240 J	< 250 J	< 240 J
Heptachlor	< 260	< 260	< 2330	< 260	< 260	< 260	R	R	< 260
Hexachlorobenzene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Hexachlorobutadiene (SVOA)	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Hexachlorocyclopentadiene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Hexachloroethane	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Indeno(1,2,3-cd)pyrene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Isophorone	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Methyl methane sulfonate	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
N-Nitrosodibutylamine	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
N-Nitrosodimethylamine	< 240 J	< 240 J	< 2120 J	< 230 J	< 240 J	< 230 J	< 240 J	< 250 J	< 240 J
N-Nitrosodiphenylamine	< 310	< 310	< 2760	< 300	< 310	< 300	< 320	< 320	< 310
N-Nitrosodipropylamine	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
N-Nitrosoperidine	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Naphthalene (SVOA)	< 240 J	< 240 J	< 2120 J	< 230 J	< 240 J	< 230 J	< 240 J	< 250 J	< 240 J
Nitrobenzene	< 240	< 240	< 2120	< 230	1280	< 230	< 240	< 250	< 240
Pentachlorobenzene	< 410	< 400	< 3610	< 400	< 400	< 400	< 410	< 420	< 400
Pentachloronitrobenzene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Pentachlorophenol	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Phenacetin	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240

LE 4.6-1
Soil Analytical Results
MU 13: Existing Process Trench

SAMPLE ID	SM013-TB04-1113	SM013-TB04-1617	SM013-TB05-0001	SM013-TB05-0305	SM013-TB05-1719	SM013-TB06-0001	SM013-TB06-0305	SM013-TB06-1214	SM013-TB07-0001
SAMPLE DEPTH(ft)	11.00-13.00	16.00-17.00	0.00-1.00	3.00-5.00	17.00-19.00	0.00-1.00	3.00-5.00	12.00-14.00	0.00-1.00
SAMPLE LOCATION	TB04	TB04	TB05	TB05	TB05	TB06	TB06	TB06	TB07
SAMPLE DATE	7/3/1997	7/3/1997	7/8/1997	7/8/1997	7/8/1997	7/14/1997	7/14/1997	7/14/1997	7/14/1997
PARAMETER									
Phenanthrene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Phenol	< 140	< 140	< 1270	< 140	< 140	< 140	< 150	< 150	< 140
Pyrene	< 240 J	< 240 J	< 2120 J	< 230 J	< 240 J	< 230 J	< 240 J	< 250 J	< 240 J
Pyridine	< 260	< 260	< 2330	< 260	< 260	< 260	< 270	< 270	< 260
Trimethylphosphate	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
Triphenylphosphate	< 1200	< 1190	< 10600	< 1170	< 1180	< 1170	< 1220	< 1230	< 1180
m,p-Cresol	< 360	< 360	< 3180	< 350	< 350	< 350	< 370	< 370	< 350
m-Nitrotoluene	< 240	< 240	< 2120	< 230	270	< 230	< 240	< 250	< 240
m-Toluidine	< 480	< 480	< 4240	< 470	< 470	< 470	< 490	< 490	< 470
o,p-Toluidine	< 1220	< 1210	< 10800	< 1190	< 1200	< 1200	< 1240	< 1250	< 1200
o-Cresol	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
o-Nitrotoluene	< 240	< 240	< 2120	< 230	2110	< 230	< 240	< 250	< 240
p-Chloroaniline	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
p-Dimethylaminoazobenzene	< 240	< 240	< 2120	< 230	< 240	< 230	< 240	< 250	< 240
p-Nitrotoluene	< 360	< 360	< 3180	< 350	2380	< 350	< 370	< 370	< 350
Metals (µg/kg)									
Antimony	< 479	< 476	< 424	< 467	< 472	< 469	NA	< 490	< 471
Cadmium	560	600	480	700	600	< 470	NA	760	< 470
Chromium	19600	11100	7500	17700	11300	17900	NA	15100	24900
Lead	16200	11700	8290	15400	11600	15000	NA	13900	13000
Nickel	24600	13700	17100	23400	15100	23400	NA	21600	33900
Miscellaneous (µg/kg)									
Percent Moisture	17 %	16 %	5.8 %	14 %	15 %	15 %	18 %	18 %	15 %
Total Organic Carbon	NA								

B=Blank Contamination

J-Estimated Value

NA=Not Analyzed

R=Data Rejected for Quality Reasons

TABLE 4.6-1
Soil Analytical Results for SWMU 13: Existing Process Trench

SAMPLE ID SAMPLE DEPTH(ft) SAMPLE LOCATION SAMPLE DATE	SM013-TB07-0305 3.00-5.00 TB07 7/14/1997	SM013-TB07-1315 13.00-15.00 TB07 7/14/1997	SM013-TB08-0102 1.00-2.00 TB08 7/15/1997	SM013-TB08-0305 3.00-5.00 TB08 7/15/1997	SM013-TB08-0911 9.00-11.00 TB08 7/17/1997	SM013-TB08-1517 15.00-17.00 TB08 7/15/1997
PARAMETER						
Volatiles (µg/kg)						
1,1,1,2-Tetrachloroethane	< 298	< 315	< 280	< 298	< 317 J	< 313
1,1,1-Trichloroethane	< 155	< 164	< 145	< 155	< 165 J	< 163
1,1,2,2-Tetrachloroethane	< 155	< 164	< 145	< 155	< 165 J	< 163
1,1,2-Trichloroethane	< 298	< 315	< 280	< 298	< 317 J	< 313
1,1-Dichloroethane	< 155	< 164	< 145	< 155	< 165 J	< 163
1,1-Dichloroethene	< 298	< 315	< 280	< 298	< 317 J	< 313
1,1-Dichloropropene	< 155	< 164	< 145	< 155	< 165 J	< 163
1,2,3-Trichlorobenzene (VOAS)	< 155	< 164	< 145	< 155	< 165 J	< 163
1,2,3-Trichloropropane	< 155	< 164	< 145	< 155	< 165 J	< 163
1,2,4-Trichlorobenzene (VOAS)	< 155	< 164	< 145	< 155	< 165 J	< 163
1,2,4-Trimethylbenzene	< 155	< 164	< 145	< 155	< 165 J	< 163
1,2-Dibromo-3-chloropropane	< 298	< 315	< 280	< 298	< 317 J	< 313
1,2-Dibromoethane	< 155	< 164	< 145	< 155	< 165 J	< 163
1,2-Dichlorobenzene (VOAS)	< 298	< 315	< 280	< 298	< 317 J	< 313
1,2-Dichloroethane	< 298	< 315	< 280	< 298	< 317 J	< 313
1,2-Dichloropropane	< 452	< 479	< 425	< 452	< 482 J	< 476
1,3,5-Trimethylbenzene	< 155	< 164	< 145	< 155	< 165 J	< 163
1,3-Dichlorobenzene (VOAS)	< 298	< 315	< 280	< 298	< 317 J	< 313
1,3-Dichloropropane	< 155	< 164	< 145	< 155	< 165 J	< 163
1,4-Dichlorobenzene (VOAS)	< 298	< 315	< 280	< 298	< 317 J	< 313
2,2-Dichloropropane	< 155	< 164	< 145	< 155	< 165 J	< 163
2-Butanone	< 1050	< 1110	< 984	< 1050	< 1120 J	< 1100
2-Chloroethyl Vinyl Ether	< 298	< 315	< 280	< 298	< 317 J	< 313
2-Chlorotoluene	< 155	< 164	< 145	< 155	< 165 J	< 163
2-Hexanone	< 452	< 479	< 425	< 452	< 482 J	< 476
4-Chlorotoluene	< 155	< 164	< 145	< 155	< 165 J	< 163
4-Methyl-2-pentanone	< 452	< 479	< 425	< 452	< 482 J	< 476
Acetone	< 1050	< 1110	< 984	< 1050	< 1120 J	< 1100
Acrolein	< 2980	< 3150	< 2800	< 2980	< 3170 J	< 3130
Acrylonitrile	< 1550	< 1640	< 1450	< 1550	< 1650 J	< 1630
Allyl Chloride	< 155	< 164	< 145	< 155	< 165 J	< 163
Benzene	< 155	< 164	< 145	< 155	< 165 J	< 163
Bromobenzene	< 155	< 164	< 145	< 155	< 165 J	< 163
Bromochloromethane	< 155	< 164	< 145	< 155	< 165 J	< 163
Bromodichloromethane	< 298	< 315	< 280	< 298	< 317 J	< 313
Bromoform	< 155	< 164	< 145	< 155	< 165 J	< 163
Bromomethane	< 452	< 479	< 425	< 452	< 482 J	< 476
Carbon Disulfide	< 452	< 479	< 425	< 452	< 482 J	< 476
Carbon Tetrachloride	< 155	< 164	< 145	< 155	< 165 J	< 163
Chlorobenzene	< 155	< 164	< 145	< 155	< 165 J	< 163
Chloroethane	< 452	< 479	< 425	< 452	< 482 J	< 476
Chloroform	< 155	< 164	< 145	< 155	< 165 J	< 163

LE 4.6-1
Soil Analytical Results
MU 13: Existing Process Trench

SAMPLE ID	SM013-TB07-0305	SM013-TB07-1315	SM013-TB08-0102	SM013-TB08-0305	SM013-TB08-0911	SM013-TB08-1517
SAMPLE DEPTH(ft)	3.00-5.00	13.00-15.00	1.00-2.00	3.00-5.00	9.00-11.00	15.00-17.00
SAMPLE LOCATION	TB07	TB07	TB08	TB08	TB08	TB08
SAMPLE DATE	7/14/1997	7/14/1997	7/15/1997	7/15/1997	7/17/1997	7/15/1997
PARAMETER						
Chloromethane	< 298	< 315	< 280	< 298	< 317 J	< 313
Dibromochloromethane	< 155	< 164	< 145	< 155	< 165 J	< 163
Dibromomethane	< 155	< 164	< 145	< 155	< 165 J	< 163
Dichlorodifluoromethane	< 298	< 315	< 280	< 298	< 317 J	< 313
Ethyl Methacrylate	< 155	< 164	< 145	< 155	< 165 J	< 163
Ethylbenzene	< 155	< 164	< 145	< 155	< 165 J	< 163
Freon 113	595 J	516 J	358 J	405 J	1040 J	376 J
Freon 141b	< 155	< 164	< 145	< 155	< 165 J	< 163
Hexachlorobutadiene (VOAS)	< 298	< 315	< 280	< 298	< 317 J	< 313
Isopropylbenzene	< 452	< 479	< 425	< 452	< 482 J	< 476
Methyl Iodide	< 452	< 479	< 425	< 452	< 482 J	< 476
Methylene Chloride	< 298	< 315	< 280	< 298	< 317 J	< 313
Naphthalene (VOAS)	< 155	< 164	< 145	< 155	< 165 J	< 163
Styrene	< 155	< 164	< 145	< 155	< 165 J	< 163
Tetrachloroethene	< 155	< 164	< 145	< 155	< 165 J	< 163
Toluene	< 155	< 164	< 145	< 155	< 165 J	< 163
Trichloroethene	< 155	< 164	< 145	< 155	< 165 J	< 163
Trichlorodifluoromethane	< 298	< 315	< 280	< 298	< 317 J	< 313
Vinyl Acetate	< 452	< 479	< 425	< 452	< 482 J	< 476
Vinyl Chloride	< 298	< 315	< 280	< 298	< 317 J	< 313
cis-1,2-Dichloroethene	< 298	< 315	< 280	< 298	< 317 J	< 313
cis-1,3-Dichloropropene	< 155	< 164	< 145	< 155	< 165 J	< 163
m+p-Xylene	< 155	< 164	< 145	< 155	< 165 J	< 163
n-Butylbenzene	< 155	< 164	< 145	< 155	< 165 J	< 163
n-Propylbenzene	< 155	< 164	< 145	< 155	< 165 J	< 163
o-Xylene	< 155	< 164	< 145	< 155	< 165 J	< 163
p-Isopropyltoluene	< 155	< 164	< 145	< 155	< 165 J	< 163
sec-Butylbenzene	< 155	< 164	< 145	< 155	< 165 J	< 163
tert-Butylbenzene	< 155	< 164	< 145	< 155	< 165 J	< 163
trans-1,2-Dichloroethene	< 298	< 315	< 280	< 298	< 317 J	< 313
trans-1,3-Dichloropropene	< 155	< 164	< 145	< 155	< 165 J	< 163
trans-1,4-Dichloro-2-butene	< 1550	< 1640	< 1450	< 1550	< 1650 J	< 1630
Semivolatiles (µg/kg)						
1,2,3-Trichlorobenzene (SVOA)	< 290	< 300	< 540	< 290	< 300	< 300
1,2,4,5-Tetrachlorobenzene	< 290	< 300	< 540	< 290	< 300	< 300
1,2,4-Trichlorobenzene (SVOA)	< 240	< 250	< 450	< 240	< 250	< 250
1,2-Dichlorobenzene (SVOA)	< 240	< 250	< 450	< 240	< 250	< 250
1,3-Dichlorobenzene (SVOA)	< 240	< 250	< 450	< 240	< 250	< 250
1,4-Dichlorobenzene (SVOA)	< 240	< 250	< 450	< 240	< 250	< 250
1-Chloronaphthalene	< 600	< 630	< 1120	< 600	< 630	< 630
1-Methylnaphthalene	< 240	< 250	< 450	< 240	< 250	< 250
1-Naphthylamine	< 810	< 860	< 1520	< 810	< 860	< 850

TABLE 4.6-1
Soil Analytical Results for SWMU 13: Existing Process Trench

SAMPLE ID	SM013-TB07-0305	SM013-TB07-1315	SM013-TB08-0102	SM013-TB08-0305	SM013-TB08-0911	SM013-TB08-1517
SAMPLE DEPTH(ft)	3.00-5.00	13.00-15.00	1.00-2.00	3.00-5.00	9.00-11.00	15.00-17.00
SAMPLE LOCATION	TB07	TB07	TB08	TB08	TB08	TB08
SAMPLE DATE	7/14/1997	7/14/1997	7/15/1997	7/15/1997	7/17/1997	7/15/1997
PARAMETER						
2,3,4,6-Tetrachlorophenol	< 480	< 500	< 890	< 480	< 510	< 500
2,3-Dichloroaniline	< 240	< 250	< 450	< 240	< 250	< 250
2,4,5-Trichlorophenol	< 240	< 250	< 450	< 240	< 250	< 250
2,4,6-Trichlorophenol	< 240	< 250	< 450	< 240	< 250	< 250
2,4-Dichlorophenol	< 240	< 250	< 450	< 240	< 250	< 250
2,4-Dimethylphenol	< 240	< 250	< 450	< 240	< 250	< 250
2,4-Dinitrophenol	< 1480	< 1560	< 2770	< 1480	< 1570	< 1550
2,4-Dinitrotoluene	< 240	< 250	< 450	< 240	< 250	< 250
2,4-Toluenediamine	< 1190	< 1260	< 2240	< 1190	< 1270	< 1250
2,6-Dichlorophenol	< 240	< 250	< 450	< 240	< 250	< 250
2,6-Dinitrotoluene	< 240	< 250	< 450	< 240	< 250	< 250
2-Chloronaphthalene	< 240	< 250	< 450	< 240	< 250	< 250
2-Chlorophenol	< 240	< 250	< 450	< 240	< 250	< 250
2-Methylnaphthalene	< 240 J	< 250 J	< 450 J	< 240 J	< 250 J	< 250 J
2-Naphthylamine	< 900	< 960	< 1700	< 900	< 960	< 950
2-Nitroaniline	< 290	< 300	< 540	< 290	< 300	< 300
2-Nitrodiphenylamine	< 240	< 250	< 450	< 240	< 250	< 250
2-Nitrophenol	< 240	< 250	< 450	< 240	< 250	< 250
2-Picoline	< 880	< 930	< 1660	< 880	< 940	< 930
3,3'-Dichlorobenzidine	< 1450	< 1540	< 2730	< 1450	< 1550	< 1530
3-Methylcholanthrene	< 240	< 250	< 450	< 240	< 250	< 250
3-Nitroaniline	< 240	< 250	< 450	< 240	< 250	< 250
4,4' Methyleneedianiline	< 2100	R	< 3940	< 2100	< 2230	< 2210
4,6-Dinitro-o-cresol	< 240	< 250	< 450	< 240	< 250	< 250
4-Aminobiphenyl	< 240	< 250	< 450	< 240	< 250	< 250
4-Aminodiphenylamine	< 600	< 630	< 1120	< 600	< 630	< 630
4-Bromophenyl phenyl ether	< 240	< 250	< 450	< 240	< 250	< 250
4-Chloro-m-cresol	< 240	< 250	< 450	< 240	< 250	< 250
4-Chlorophenylphenyl ether	< 240	< 250	< 450	< 240	< 250	< 250
4-Nitroaniline	< 240	< 250	< 450	< 240	< 250	< 250
4-Nitrophenol	< 240 J	< 250 J	< 450 J	< 240 J	< 250 J	< 250 J
5-Nitro-o-toluidine	< 240	< 250	< 450	< 240	< 250	< 250
7,12-dimethylbenz[a]anthracene	< 240	< 250	< 450	< 240	< 250	< 250
Acenaphthene	< 240	< 250	< 450	< 240	< 250	< 250
Acenaphthylene	< 240	< 250	< 450	< 240	< 250	< 250
Acetophenone	< 310	< 330	< 580	< 310	< 330	< 330
Aniline	< 330	< 350	< 630	< 330	< 350	< 350
Anthracene	< 240	< 250	< 450	< 240	< 250	< 250
Azobenzene	< 290	< 300	< 540	< 290	< 300	< 300
Benzidine	< 3810	< 4030	< 7160	< 3810	< 4060	< 4010
Benzo(a)anthracene	< 310	< 330	< 580	< 310	< 330	< 330
Benzo(a)pyrene	< 240	< 250	< 450	< 240	< 250	< 250

LE 4.6-1
Soil Analytical Results MU 13: Existing Process Trench

SAMPLE ID	SM013-TB07-0305	SM013-TB07-1315	SM013-TB08-0102	SM013-TB08-0305	SM013-TB08-0911	SM013-TB08-1517
SAMPLE DEPTH(ft)	3.00-5.00	13.00-15.00	1.00-2.00	3.00-5.00	9.00-11.00	15.00-17.00
SAMPLE LOCATION	TB07	TB07	TB08	TB08	TB08	TB08
SAMPLE DATE	7/14/1997	7/14/1997	7/15/1997	7/15/1997	7/17/1997	7/15/1997
PARAMETER						
Benzo(b)fluoranthene	< 240	< 250	< 450	< 240	< 250	< 250
Benzo(ghi)perylene	< 260	< 280	< 490	< 260	< 280	< 280
Benzo(k)fluoranthene	< 240	< 250	< 450	< 240	< 250	< 250
Benzoic Acid	< 240	< 250	< 450	< 240	600	< 250
Benzyl Alcohol	< 240	< 250	< 450	< 240	< 250	< 250
Benzyl butyl phthalate	< 240	< 250	< 450	< 240	< 250	< 250
Bis(2-chloroethoxymethane)	< 240	< 250	< 450	< 240	< 250	< 250
Bis(2-chloroethyl)ether	< 240	< 250	< 450	< 240	< 250	< 250
Bis(2-chloroisopropyl)ether	< 240	< 250	< 450	< 240	< 250	< 250
Bis(2-ethylhexyl) phthalate	460 B	400 B	1690 B	820 B	400	1550 B
Bisphenol A	< 430	< 450	< 810	< 430	< 460	< 450
Carbazole	< 1190	< 1260	< 2240	< 1190	R	< 1250
Chrysene	< 240	< 250	< 450	< 240	< 250	< 250
Cyclohexanone	< 240	< 250	< 450	< 240	< 250	< 250
Di-n-butyl phthalate	1870 JB	790 JB	1610 JB	2250 JB	1940 JB	1390 JB
Di-n-octyl phthalate	< 240	< 250	< 450	< 240	< 250	< 250
Dibenzo(a,h)anthracene	< 240	< 250	< 450	< 240	< 250	< 250
Dibenzofuran	< 240	< 250	< 450	< 240	< 250	< 250
Diethyl Phthalate	< 240	< 250	< 450	< 240	< 250	< 250
Dimethylphthalate	< 240	< 250	< 450	< 240	< 250	< 250
Ethyl Methane Sulfonate	< 430	1410	< 810	< 430	< 460	< 450
Fluoranthene	< 240 J	< 250 J	< 450 J	< 240 J	< 250 J	< 250 J
Fluorene	< 240 J	< 250 J	< 450 J	< 240 J	< 250 J	< 250 J
Heptachlor	< 260	< 280	< 490	< 260	R	< 280
Hexachlorobenzene	< 240	< 250	< 450	< 240	< 250	< 250
Hexachlorobutadiene (SVOA)	< 240	< 250	< 450	< 240	< 250	< 250
Hexachlorocyclopentadiene	< 240	< 250	< 450	< 240	< 250	< 250
Hexachloroethane	< 240	< 250	< 450	< 240	< 250	< 250
Indeno(1,2,3-cd)pyrene	< 240	< 250	< 450	< 240	< 250	< 250
Isophorone	< 240	< 250	< 450	< 240	< 250	< 250
Methyl methane sulfonate	< 240	< 250	< 450	< 240	< 250	< 250
N-Nitrosodibutylamine	< 240	< 250	< 450	< 240	< 250	< 250
N-Nitrosodimethylamine	< 240 J	< 250 J	< 450 J	< 240 J	< 250 J	< 250 J
N-Nitrosodiphenylamine	< 310	< 330	< 580	< 310	< 330	< 330
N-Nitrosodipropylamine	< 240	< 250	< 450	< 240	< 250	< 250
N-Nitrosopiperidine	< 240	< 250	< 450	< 240	< 250	< 250
Naphthalene (SVOA)	< 240 J	< 250 J	< 450 J	< 240 J	< 250 J	< 250 J
Nitrobenzene	< 240	< 250	< 450	< 240	< 250	< 250
Pentachlorobenzene	< 400	< 430	< 760	< 400	< 430	< 430
Pentachloronitrobenzene	< 240	< 250	< 450	< 240	< 250	< 250
Pentachlorophenol	< 240	< 250	< 450	< 240	< 250	< 250
Phenacetin	< 240	< 250	< 450	< 240	< 250	< 250

TABLE 4.6-1

SAMPLE ID	SM013-TB07-0305	SM013-TB07-1315	SM013-TB08-0102	SM013-TB08-0309	SM013-TB08-0911	SM013-TB08-1511
SAMPLE DEPTH(ft)	3.00-5.00	13.00-15.00	1.00-2.00	3.00-5.00	9.00-11.00	15.00-17.00
SAMPLE LOCATION	TB07	TB07	TB08	TB08	TB08	TB08
SAMPLE DATE	7/14/1997	7/14/1997	7/15/1997	7/15/1997	7/17/1997	7/15/1997
PARAMETER						
Phenanthrene	< 240	< 250	< 450	< 240	< 250	< 250
Phenol	< 140	< 150	< 270	< 140	< 150	< 150
Pyrene	< 240 J	< 250 J	< 450 J	< 240 J	< 250 J	< 250 J
Pyridine	< 260	< 280	< 490	< 260	< 280	< 280
Trimethylphosphate	< 240	< 250	< 450	< 240	< 250	< 250
Triphenylphosphate	< 1190	< 1260	< 2240	< 1190	< 1270	< 1250
m,p-Cresol	< 360	< 380	< 670	< 360	< 380	< 380
m-Nitrotoluene	< 240	< 250	< 450	< 240	< 250	< 250
m-Toluidine	< 480	< 500	< 890	< 480	< 510	< 500
o,p-Toluidine	< 1210	< 1280	< 2280	< 1210	< 1290	< 1280
o-Cresol	< 240	< 250	< 450	< 240	< 250	< 250
o-Nitrotoluene	< 240	< 250	< 450	< 240	< 250	< 250
p-Chloroaniline	< 240	< 250	< 450	< 240	< 250	< 250
p-Dimethylaminoazobenzene	< 240	< 250	< 450	< 240	< 250	< 250
p-Nitrotoluene	< 360	< 380	< 670	< 360	< 380	< 380
Metals (µg/kg)						
Antimony	< 476	< 504	< 447	< 476	< 507	< 501
Cadmium	670	< 500	< 450	< 480	780	< 500
Chromium	20000	20200	14400	17600	21200	20800
Lead	17100	15000	7450	15600	16200	18300
Nickel	25600	26300	15200	21500	24200	23900
Miscellaneous (µg/kg)						
Percent Moisture	16 %	21 %	11 %	16 %	21 %	20 %
Total Organic Carbon	NA	NA	1000000	NA	NA	NA

B=Blank Contamination

J-Estimated Value

NA=Not Analyzed

R=Data Rejected for Quality Reasons

TABLE 4.6-2
Summary of Field Observations
SWMU 13: Existing Process Trench

Boring Number	SM013-							
	TB01	TB02	TB03	TB04	TB05	TB06	TB07	TB08
Asphalt (ft-bgs) ⁽¹⁾	0-0.5	0-0.5			0-0.5			0-0.5
Gravel (ft-bgs)	0.5-2.5	0.5-2.5	0-3	0-2	0.5-1.5	0-0.5	0-0.5	0.5-1
Silty Sand (ft-bgs)	2.5-9	13-15.5			13-14	0.5-9	0.5-6	1-2 / 14-21
Silty/Sandy Clay (ft-bgs)	9-25	-5 / 15.5-1	3-13.5	2-5 / 9-13	1.5-12.5 / 14-17	9-15.5	6-17.5	2-14
Sand (ft-bgs)		5-13	13.5-21	5-9	12.5-13	15.5-21	18-21	
Perched Groundwater (ft-bgs)		13	11.5	15.2				
Groundwater (ft-bgs)	23.2	17	18.1	17.8	19.7	14.7	15.4	17.1
Total Depth (ft-bgs)	25	17	21	21	21	21	21	21
OVM ⁽²⁾ Readings (ppm ⁽³⁾ @ ft-bgs)	0.4 @ 7-9 40 @ 8.5			11.2 @ 11-13 26 @ 16-17	6.5 @ 3-5			
Additional Observations	Trace TDI @ 9-13 ft-bgs.							

NOTES:

⁽¹⁾ ft-bgs = Feet Below Ground Surface

⁽²⁾ OVM = Organic Vapor Monitor

⁽³⁾ ppm = Parts per Million

TABLE 4.6-3
Comparison to Risk-Based Criteria
SWMU 13: Existing Process Trench

Constituent	Maximum Detected Concentration (mg/kg) (1)	Maximum Detection Limit for Non-Detects (mg/kg)	Frequency of Detection	EPA Region III Risk-Based Concentrations for Soil (mg/kg)		USEPA Soil Screening Level (mg/kg)	Maximum Detection Exceeds Criteria	Maximum Detection Limit for Non-Detects Exceeds Criteria
				Industrial	Residential			
MISCELLANEOUS								
Total Organic Carbon	8700	NA (2)	4 / 4	--	--	--	No	No
METALS								
Cadmium	1.31	< 0.5	14 / 26	1000	39	8	No	No
Chromium	35.9	< 0.35	25 / 26	10000	390	38	No	No
Lead	37.7	NA	26 / 26	800	400	--	No	No
Nickel	207	< 0.46	25 / 26	41000	1600	130	> SSL	No
VOLATILES								
1,1,2,2-Tetrachloroethane	ND (3)	< 0.29	0 / 28	29	3.2	0.003	No	> SSL
1,1,2-Trichloroethane	ND	< 0.57	0 / 28	100	11	0.02	No	> SSL
1,1-Dichloroethene	ND	< 0.57	0 / 28	9.5	1.1	0.06	No	> SSL
1,2,3-Trichloropropane	ND	< 0.29	0 / 28	0.82	0.091	--	No	> RES
1,2-Dibromo-3-chloropropane	ND	< 0.57	0 / 28	4.1	0.46	--	No	> RES
1,2-Dibromoethane	ND	< 0.29	0 / 28	0.067	0.0075	--	No	> IND, RES
1,2-Dichloroethane	ND	< 0.57	0 / 28	63	7	0.02	No	> SSL
1,2-Dichloropropane	ND	< 0.86	0 / 28	84	9.4	0.03	No	> SSL
Acrylonitrile	ND	< 2.87	0 / 28	11	1.2	--	No	> RES
Benzene	ND	< 0.29	0 / 28	200	22	0.03	No	> SSL
Bromomethane	ND	< 0.86	0 / 28	2900	110	0.2	No	> SSL
Carbon Tetrachloride	ND	< 0.29	0 / 28	44	4.9	0.07	No	> SSL
Chlorobenzene	138	< 0.17	9 / 28	41000	1600	1	> SSL	No
cis-1,2-Dichloroethene	ND	< 0.57	0 / 28	20000	780	0.4	No	> SSL
cis-1,3-Dichloropropene	ND	< 0.29	0 / 28	33	3.7	0.004	No	> SSL
Freon 113	1.89	< 0.31	17 / 28	410000	16000	--	No	No
Methylene Chloride	ND	< 0.57	0 / 28	760	85	0.02	No	> SSL
p-Isopropyltoluene	0.76 J (4)	< 0.17	1 / 28	--	--	--	No	No
Tetrachloroethene	ND	< 0.29	0 / 28	110	12	0.06	No	> SSL
Toluene	16.5	< 0.29	1 / 28	410000	16000	12	> SSL	No
trans-1,3-Dichloropropene	ND	< 0.29	0 / 28	33	3.7	0.004	No	> SSL
Trichloroethene	ND	< 0.29	0 / 28	520	58	0.06	No	> SSL
Vinyl Chloride	ND	< 0.57	0 / 28	3	0.34	0.01	No	> RES, SSL
SEMICVOLATILES								
1,2-Dichlorobenzene	4.75	< 2.28	8 / 31	180000	7000	17	No	No
1,4-Dichlorobenzene	ND	< 2.28	0 / 31	240	27	2	No	> SSL
1-Methylnaphthalene	1.52	< 2.28	2 / 28	82000	3100	--	No	No
1-Naphthylamine	ND	< 7.74	0 / 28	0.044	0.0049	--	No	> IND, RES
2,4,6-Trichlorophenol	ND	< 2.38	0 / 29	520	58	0.2	No	> SSL
2,4-Dichlorophenol	ND	< 2.38	0 / 29	6100	230	1	No	> SSL
2,4-Dinitrophenol	ND	< 14.8	0 / 29	4100	160	0.3	No	> SSL

E 4.6-3
Comparison to Risk-Based Criteria
SWMU 13: Existing Process Trench

Constituent	Maximum Detected Concentration (mg/kg) (1)	Maximum Detection Limit for Non-Detects (mg/kg)	Frequency of Detection	EPA Region III Risk-Based Concentrations for Soil (mg/kg)		USEPA Soil Screening Level (mg/kg)	Maximum Detection Exceeds Criteria	Maximum Detection Limit for Non-Detects Exceeds Criteria
				Industrial	Residential			
SEMIVOLATILES (cont.)								
2,4-Dinitrotoluene	1.07	< 2.28	3 / 28	4100	160	0.0008	> SSL	> SSL
2,4-Toluenediamine	ND	< 11.4	0 / 28	1.8	0.2	--	No	> IND, RES
2,6-Dinitrotoluene	6.38	< 2.28	2 / 28	2000	78	0.0007	> SSL	> SSL
2-Methylnaphthalene	2.31 J	< 2.28	4 / 28	82000	3100	84	No	No
2-Naphthylamine	ND	< 8.65	0 / 28	0.044	0.0049	--	No	> IND, RES
3,3'-Dichlorobenzidine	ND	< 13.9	0 / 28	13	1.4	0.007	No	> IND, RES, SSL
4,4' Methyleneedianiline	12.7	< 20	1 / 26	--	--	--	No	No
4-Nitrophenol	2.15 J	< 2.38	1 / 29	16000	630	--	No	No
5-Nitro-o-toluidine	0.42	< 2.28	1 / 28	170	19	--	No	No
Aniline	16.7 J	< 3.19	5 / 29	1000	110	--	No	No
Benzidine	ND	< 36.4	0 / 28	0.025	0.0028	--	No	> IND, RES
Benzo(a)anthracene	0.33	< 2.96	1 / 28	7.8	0.88	2	No	> RES, SSL
Benzo(a)pyrene	0.27	< 2.28	2 / 24	0.78	0.088	8	> RES	> IND, RES
Benzo(b)fluoranthene	9.76 J	< 2.28	2 / 25	7.8	0.88	5	> IND, RES, SSL	> RES
Benzo(ghi)perylene	6.95 J	< 2.5	1 / 25	61000	2300	4200	No	No
Benzo(k)fluoranthene	8.73 J	< 2.28	3 / 29	78	8.8	49	No	No
Benzoic Acid	0.6	< 2.38	1 / 29	1000000	310000	400	No	No
Bis(2-chloroethyl)ether	ND	< 2.28	0 / 24	5.2	0.58	0.0004	No	> RES, SSL
Bis(2-ethylhexyl) phthalate	8.7	< 2.73	19 / 28	410	46	3600	No	No
Bisphenol A	195.45 J	< 4.1	7 / 29	100000	3900	--	No	No
Carbazole	ND	< 11.4	0 / 27	290	32	0.6	No	> SSL
Chrysene	5.97 J	< 2.28	2 / 29	780	88	160	No	No
Di-n-butyl phthalate	13.8 J	< 2.12	23 / 28	200000	7800	2300	No	No
Di-n-octyl phthalate	0.33	< 2.28	1 / 28	41000	1600	10000	No	No
Dibenzo(a,h)anthracene	ND	< 2.28	0 / 24	0.78	0.088	2	No	> IND, RES, SSL
Dibenzofuran	0.61	< 2.28	2 / 28	8200	310	--	No	No
Diethyl Phthalate	0.26	< 2.28	1 / 28	1000000	63000	470	No	No
Ethyl Methane Sulfonate	1.41	< 4.1	1 / 28	--	--	--	No	No
Fluoranthene	0.57 J	< 2.28	1 / 28	82000	3100	4300	No	No
Heptachlor	ND	< 2.5	0 / 25	1.3	0.14	23	No	> IND, RES
Hexachlorobenzene	ND	< 2.28	0 / 28	3.6	0.4	2	No	> RES, SSL
Hexachlorobutadiene	ND	< 2.28	0 / 31	73	8.2	2	No	> SSL
Hexachloroethane	ND	< 2.28	0 / 24	410	46	0.5	No	> SSL
Indeno(1,2,3-cd)pyrene	6.28 J	< 2.28	1 / 25	7.8	0.88	14	> RES	> RES
Isophorone	ND	< 2.28	0 / 28	6000	670	0.5	No	> SSL
m-Nitrotoluene	0.27	< 2.28	1 / 28	20000	780	--	No	No
m-Toluidine	ND	< 4.55	0 / 28	30	3.4	--	No	> RES
N-Nitrosodibutylamine	ND	< 2.28	0 / 28	1.1	0.12	--	No	> IND, RES

TABLE 4.6-3
Comparison to Risk-Based Criteria
SWMU 13: Existing Process Trench

Constituent	Maximum Detected Concentration (mg/kg) (1)	Maximum Detection Limit for Non-Detects (mg/kg)	Frequency of Detection	EPA Region III Risk-Based Concentrations for Soil (mg/kg)		USEPA Soil Screening Level (mg/kg)	Maximum Detection Exceeds Criteria	Maximum Detection Limit for Non-Detects Exceeds Criteria
				Industrial	Residential			
SEMIVOLATILES (cont.)								
N-Nitrosodimethylamine	ND	< 2.28	0 / 28	0.11	0.013	--	No	> IND, RES
N-Nitrosodiphenylamine	ND	< 2.96	0 / 28	1200	130	1	No	> SSL
N-Nitrosodipropylamine	ND	< 2.28	0 / 28	0.82	0.091	0.00005	No	> IND, RES, SSL
Naphthalene	2.09 J	< 2.28	2 / 31	82000	3100	84	No	No
Nitrobenzene	73.91	< 2.28	2 / 28	1000	39	0.1	>RES, SSL	> SSL
o,p-Toluidine	ND	< 11.6	0 / 28	30	3.4	--	No	> RES
o-Nitrotoluene	2.11	< 2.28	2 / 28	20000	780	--	No	No
p-Chloroaniline	41.36	< 2.28	4 / 28	8200	310	0.7	> SSL	> SSL
p-Nitrotoluene	2.38	< 3.41	2 / 28	20000	780	--	No	No
Pentachlorophenol	ND	< 2.38	0 / 29	48	5.3	0.03	No	> SSL
Phenanthrene	0.71	< 2.28	4 / 28	82000	3100	4300	No	No
Phenol	5.49	< 1.43	4 / 29	1000000	47000	100	No	No
Pyrene	14.5 J	< 2.28	3 / 29	61000	2300	4200	No	No

(1) "mg/kg" - Units reported in milligrams per kilogram (equivalent to parts per million) unless otherwise noted.

(2) NA - Not applicable.

(3) ND - Not detected.

(4) "J" - Estimated value.

-- - Value not available for this constituent.

TABLE 4.6-4
Site-Specific Soil Screening
SWMU 13: Existing Process Trench

Constituent	Maximum Detected Concentration (mg/kg) ⁽¹⁾	Maximum Detection Limit for Non-Detects (mg/kg)	Site-Specific SSL ⁽²⁾ (mg/kg)	Maximum Detect Exceeds Site-Specific SSL	Maximum Detection Limit Exceeds Site-Specific SSL
METALS					
Nickel	207	< 0.46	4450	No	No
VOLATILES					
1,1,2,2-Tetrachloroethane	ND ⁽³⁾	< 0.29	0.0061	NA ⁽⁵⁾	Yes
1,1,2-Trichloroethane	ND	< 0.57	0.23	NA	Yes
1,1-Dichloroethene	ND	< 0.57	0.6	NA	No
1,2-Dichloroethane	ND	< 0.57	0.24	NA	Yes
1,2-Dichloropropane	ND	< 0.86	0.36	NA	Yes
Benzene	ND	< 0.29	0.43	NA	No
Bromomethane	ND	< 0.86	0.37	NA	No
Carbon Tetrachloride	ND	< 0.29	0.95	NA	Yes
Chlorobenzene	138	< 0.17	9	Yes	No
cis-1,2-Dichloroethene	ND	< 0.57	4.5	NA	No
cis-1,3-Dichloropropene	ND	< 0.29	0.0057	NA	Yes
Methylene Chloride	ND	< 0.57	0.22	NA	Yes
Tetrachloroethene	ND	< 0.29	0.87	NA	No
Toluene	16.5	< 0.29	200	No	No
trans-1,3-Dichloropropene	ND	< 0.29	0.0057	NA	Yes
Trichloroethene	ND	< 0.29	0.92	NA	No
Vinyl Chloride	ND	< 0.57	0.099	NA	Yes
SEMOVATILES					
1,4-Dichlorobenzene	ND	< 2.28	44	NA	No
2,4,6-Trichlorophenol	ND	< 2.38	2.3	NA	Yes
2,4-Dichlorophenol	ND	< 2.38	18	NA	No
2,4-Dinitrophenol	ND	< 14.8	9	NA	Yes
2,4-Dinitrotoluene	1.07	< 2.28	8.7	No	No
2,6-Dinitrotoluene	6.38	< 2.28	3.5	Yes	No
3,3'-Dichlorobenzidine	ND	< 13.9	0.1	NA	Yes
Benzo(a)anthracene	0.33	< 2.96	33	No	No
Benzo(b)fluoranthene	9.76 J ⁽⁴⁾	< 2.28	100	No	No
Bis(2-chloroethyl)ether	ND	< 2.28	0.00043	NA	Yes
Carbazole	ND	< 11.4	11	NA	Yes
Dibenz(a,h)anthracene	ND	< 2.28	32	NA	No
Hexachlorobenzene	ND	< 2.28	50	NA	No
Hexachlorobutadiene	ND	< 2.28	49	NA	No
Hexachloroethane	ND	< 2.28	1.2	NA	Yes
Isophorone	ND	< 2.28	5.3	NA	No
N-Nitrosodiphenylamine	ND	< 2.96	17	NA	No
N-Nitrosodipropylamine	ND	< 2.28	0.00052	NA	Yes
Nitrobenzene	1.28	< 2.28	0.31	Yes	Yes
p-Chloroaniline	1.98	< 2.28	14	Yes	No
Pentachlorophenol	ND	< 2.38	0.57	NA	Yes

(1) "mg/kg" -Milligrams per kilogram (equivalent to parts per million) unless otherwise noted.

(2) "SSL" - Soil Screening Level

(3) ND - Not detected.

(4) "J" - Estimated value.

(5) NA - Not applicable.

4.7 SWMU 14: Fill Materials Block 11

SWMU 14 (Fill Materials Block 11) is located in the north-central portion of Block 11. Soil borings drilled for construction foundations indicate the presence of fill material, including "black inclusions", at depths of up to 20 ft-bgs.

4.7.1 RFI Scope of Work

The scope of work at SWMU 14 included a soil gas survey performed during Phase 1 and soil sampling performed during Phase 2.

4.7.1.1 Phase 1 Scope of Work

Soil Gas Survey

Total VOC concentrations in soil gas are considered to be elevated if found above 100 µg/L. This is considered to be a conservative cut-off and was derived after several years of comparing actual soil chemistry results with soil gas results. Soil gas survey results for samples collected at 2.5 ft-bgs show elevated concentrations of VOCs in samples collected in the western section of SWMU 14 (Figure C-5 in Appendix C). Soil gas results for samples collected at 7.5 ft-bgs indicate that soils at depth are not impacted by VOCs (Figure C-6 in Appendix C). This pattern suggests a small surface spill condition.

4.7.1.2 Phase 2 Scope of Work

The scope of work for Phase 2 was based on the discussion of the Fill Materials Block 11 presented in the Description of Current Conditions report (ICF Kaiser, February, 1995). Three test borings were installed for the purpose of collecting samples for laboratory and geotechnical analysis.

Borings SM014-TB01 and SM014-TB02 were both drilled to 21 ft-bgs. Boring SM014-TB03 was drilled to 25 ft-bgs. Samples for laboratory analysis were collected from each boring at the surface (0 to 1 ft-bgs or immediately beneath the asphalt pavement) and the shallow subsurface (3 to 5 ft-bgs). A third sample was collected from each boring from the 2-foot interval above the alluvial aquifer. There were no additional samples taken from the borings due to elevated OVM readings, visual contamination, or perched water zones. The samples were submitted for analysis of SVOCs, VOCs, and TOC. Table 4.7-1 presents the complete soil analytical results for SWMU 14 and Figure 4.7-1 provides selected soil analytical results on a plan view map.

Shelby Tube samples for geotechnical analysis were collected from a twin boring drilled beside SM014-TB02. One sample was taken from the 1 to 3 ft-bgs interval and marked for sieve and hydrometer analyses. Samples from the 3 to 5 and 17 to 19 ft-bgs intervals were marked for sieve, hydrometer, bulk density, moisture content, specific gravity, and permeability analyses.

4.7.2 Field Observations

The boring logs for SWMU 14 (Appendix D) indicate that subsurface materials encountered during Phase 2 in boring SM014-TB01 are 0.4 ft of asphalt pavement covering 1.5 ft of crushed stone and sand fill material, followed by clayey sand/sandy clay to 17 ft-bgs, and fine to medium sand to depth. Materials encountered in SM014-TB02 are 0.4 ft of asphalt pavement covering clayey sand with fine gravel fill to 16 ft-bgs, followed by clayey silt to 17 ft-bgs, and clayey sand to depth. Materials encountered in SM014-TB03 are clayey sand to 23 ft-bgs, and fine to medium sand to depth. The alluvial aquifer was found at 18.8 ft-bgs in boring -TB01, at 19.2 ft-bgs in boring -TB02, and 21 ft-bgs in -TB03.

4.7.3 Risk Assessment Results

4.7.3.1 Comparison to Risk-based Criteria

Table 4.7-1 provides the complete analytical results for SWMU 14, and Figure 4.7-1 summarizes the analytical results on a plan view map. Table 4.7-2 presents a summary of all detected constituents at SWMU 14, and constituents with maximum detections or detection limits exceeding the screening criteria. In addition to maximum detected concentrations and detection limits, Table 4.7-2 also presents frequency of detection, USEPA risk-based screening criteria, default soil to groundwater SSLs (dilution attenuation factor of 20), and comparisons to the screening criteria. Bayer has been designated as an industrial facility; therefore, industrial soil RBCs are applicable for RFI decisions. Residential soil RBCs are presented to fulfill USEPA Region III documentation requirements.

One SVOC (1,4-dichlorobenzene) has a maximum detected concentration that exceeds the Region III RBC for residential soil in only 1 of 2 detections from the results of 10 samples; therefore, the average concentration of 1,4-dichlorobenzene is less than 27 mg/kg (the residential RBC for 1,4-dichlorobenzene). No constituents have maximum detected concentrations that exceed the Region III RBCs for industrial soil. In addition, 18 organics have maximum

detection limits that exceed the RBCs for both industrial and residential soils, while 12 additional organics have maximum detection limits that exceed the RBCs for residential soil.

Three VOCs (benzene, chlorobenzene and trichloroethene) and six SVOCs (1,2-dichlorobenzene, 1,4-dichlorobenzene, 2,4-dinitrotoluene, 2,6-dinitrotoluene, nitrobenzene and p-chloroaniline) have maximum detected concentrations that exceed the default USEPA SSLs. In addition, 40 organics have maximum detection limits that exceed the default USEPA SSLs.

In order to further evaluate the soil to groundwater migration pathway, site-specific SSLs were developed as discussed in the following subsection.

4.7.3.2 Site Specific Soil Screening Levels

SSLs were derived for SWMU 14 using site-specific data to further evaluate whether the constituents detected at levels exceeding the USEPA SSLs or having maximum detection limits exceeding the default SSLs have the potential to migrate from soil to groundwater at levels of concern. Site-specific SSLs were calculated for each constituent that exceeds the default USEPA SSL or has a maximum detection limit that exceeds the default SSL. Maximum detected concentrations and detection limits of constituents were then compared to the site-specific SSLs. Table 4.7-3 presents the resulting SSLs, along with the maximum detections and detection limits, and an indication of whether maximum detections or detection limits exceed the site-specific SSLs. Three SVOCs (1,2-dichlorobenzene, 2,4-dinitrotoluene and nitrobenzene) have maximum detected concentrations that exceed the site-specific SSLs for SWMU 14. Three VOCs (1,1,2,2-tetrachloroethane, cis-1,2-dichloropropene, and trans-1,3-dichloropropene) and seven SVOCs (2,4-dinitrophenol, 3,3'-dichlorobenzidine, bis(2-chloroethyl)ether, hexachloroethane, n-nitrosodipropylamine, nitrobenzene, and pentachlorophenol) have maximum detection limits that exceed the site-specific SSLs.

4.7.3.3 Site Specific Analysis

The above results indicate that no further action is necessary for SWMU 14. The reasons for assigning this SWMU to the NFA category include:

- There are no constituents detected at this SWMU with concentrations that exceed the industrial RBCs.

- The maximum detections of 1,2-dichlorobenzene, 2,4-dinitrotoluene and nitrobenzene that exceeded the site-specific SSLs were the only detections that exceeded the site-specific SSLs. All three detections occurred in sample SM014-TB03-0305. There were no other detections of constituents, particularly from deeper samples in the same boring, and all other samples were less than the maximum detection limits. While these detections are less than the site specific SSL for 1,2-dichlorobenzene and 2,4-dinitrotoluene, the detection limit is greater than the site-specific SSL for nitrobenzene. However, only SM014-TB02-001 had this elevated detection limit for nitrobenzene, and all other samples had detection limits for nitrobenzene that are less than the site-specific SSL.
- The constituents that had detection limits that exceeded the industrial RBC and were not detected in any sample could be sorted into two groups.
 - In the first group, the constituents had industrial RBCs that were generally less than 0.1 mg/kg, and the detection limits for all samples were greater than the industrial RBCs. A number of samples had detections limits for SVOCs that were 10 to 50-times the method detection limits. However, the samples were diluted 10- to 50-times during analysis in order to quantify detections of 1,2-dichlorobenzene, which were less than the industrial RBC. In this case, the detection limits appear reasonable and are unlikely to mask significant concentrations of constituents.
 - In the second group, the constituents had detection limits that were greater than the industrial RBCs only in samples SM014-TB03-0305 or SM014-TB02-0001. These two samples were diluted 50-times in order to quantify the concentration of 1,2-dichlorobenzene. In this case, the detection limits appear reasonable and are unlikely to mask significant concentrations of constituents.
- The constituents for which samples had detection limits that exceeded the site-specific SSLs and were not detected in any sample could be classified in the same way as those with detection limits that exceeded the industrial RBCs as described above.

4.7.4 Discussions with USEPA

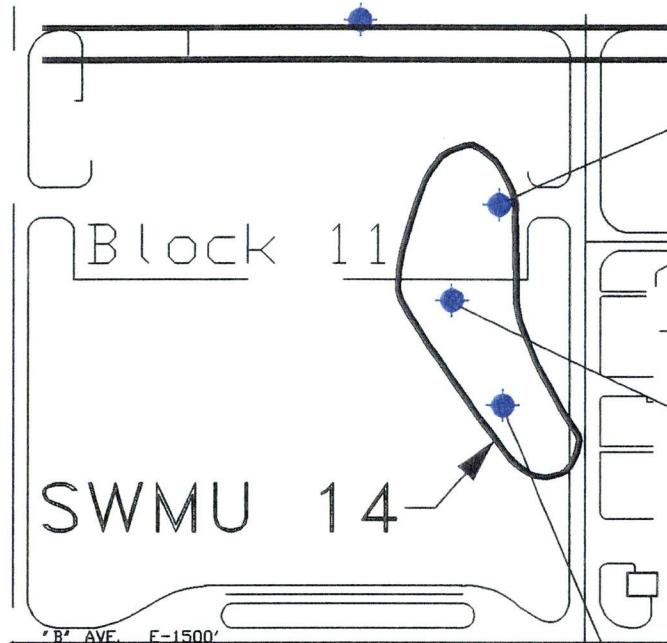
Bayer discussed the status of and the appropriate course of action for SWMU 14 with USEPA on March 10, 1999. During this discussion, USEPA concurred with Bayer that no further action is warranted for this SWMU based on the Phase 2 analytical results.

4.7.5 Conclusions and Recommendations

There are no constituents with maximum detections that exceed the industrial RBCs. Therefore, there is no concern related to the soil contact pathways. Comparison of the soil analytical data to the site-specific SSLs indicates that only 1,2-dichlorobenzene, 2,4-dinitrotoluene, and

nitrobenzene were detected above the site-specific criteria. These constituents were present in one sample with concentrations that exceed the site-specific SSLs.

Therefore, there is little concern related to migration of detected constituents from soil to groundwater at this SWMU. All detection limits for undetected constituents are considered reasonable and are not likely to mask significant concentrations of any constituents. Therefore, no further action is warranted at this SWMU. USEPA concurred with Bayer's conclusion that this SWMU warrants no further action during a March 10, 1999 conference call.



LEGEND:

SM014-TB03



TEST BORING LOCATION



SWMU BOUNDARY

NOTES:

1. "D" DENOTES DUPLICATE SAMPLE
 - "FD" DENOTES FIELD DUPLICATE SAMPLE
 - "J" DENOTES ESTIMATED VALUE
 - "K" DENOTES ESTIMATED VALUE BIASED HIGH
 - "L" DENOTES ESTIMATED VALUE BIASED LOW
 - "B" DENOTES DETECTED IN LABORATORY BLANKS
 - "NA" DENOTES NOT ANALYZED
 - "R" DENOTES REJECTED DATA
 - "RS" DENOTES RESAMPLED
2. "<" DENOTES NOT DETECTED AT INDICATED DETECTION LIMIT
 3. TEST BORING LOCATIONS WERE LOCATED BY PARSONS SURVEYING.

SM014-TB01				
SAMPLE DEPTH(ft)	0-1	3-5	16-18	16-18FD
1,2-Dichlorobenzene (VDA)	<262	538 J	726 J	520 J
Acetone	<921	<1050	1200 J	<1060
Chlorobenzene	<136	<155	979	895
Freon 113	1150 J	824 JB	834 J	326 J
1,2-Dichlorobenzene (SVDA)	<2090	8290	1860	1520
2,6-Dinitrotoluene	<2090	<2390	460	<240
5-Nitro-o-toluidine	<2090	<2390	300	<240
Benzyl Alcohol	2790	<2390	<240	<240
Bis(2-ethylhexyl) phthalate	<2510 J	<2870 J	<290 J	670 J
Bisphenol A	<3770	<4300	960	1350
Di-n-butyl phthalate	2600 J	6740 J	9670 J	4400 J
Diethyl Phthalate	<2090	<2390	290	<240
Cadmium	<420	<480	730	(480)
Chromium	5160	19600	15800	16500
Lead	4090	19200	13700	13400
Nickel	12100 J	53300 J	15400 J	12700 J

SM014-TB02				
SAMPLE DEPTH(ft)	0-1	3-5	15-19	
1,2-Dichlorobenzene (VDA)	7310	3750	91600	
1,4-Dichlorobenzene (VDA)	776	399 J	8420	
Acetone	1830 J	<1030	<1090	
Benzene	<14 B	<152	520 J	
Chlorobenzene	9360	7030	13600	
Freon 113	<285	504 J	334 J	
Toluene	<148	<152	1360	
Trichloroethene	753	<152	<161	
p-Isopropyltoluene	411 J	<152	842	
1,2-Dichlorobenzene (SVDA)	26300	11600	252000	
1,4-Dichlorobenzene (SVDA)	<11400	<2340	25600	
Aniline	<16000	<3280	12000 B	
Bisphenol A	115000	37100	132000	
p-Chloroaniline	<11400	3210	<4950	
Cadmium	<460	<470	<920	
Chromium	18400	17200	21800	
Lead	11400	22100	23600	
Nickel	50100 J	40500	82200 J	

SM014-TB03				
SAMPLE DEPTH(ft)	0-1	0-1RS	3-5	3-5RS
1,2-Dichlorobenzene (VDA)	960	NA	NA	<301 J
Chlorobenzene	796	NA	NA	301 J
Freon 113	<273	NA	NA	<301 J
1,2-Dichlorobenzene (SVDA)	R	2236	339000	NA
1,4-Dichlorobenzene (SVDA)	R	<2193	28400	NA
2,4-Dinitrotoluene	R	<2193	78000	NA
2,6-Dinitrotoluene	R	<2193	17700	NA
Aniline	R	<3070	30700	NA
Bisphenol A	R	<3947 J	253000	NA
Di-n-butyl phthalate	R	<2193	<12100 J	NA
Nitrobenzene	R	<2193	23500	NA
Phenol	R	<1316	<7230	NA
o-Nitrotoluene	R	<2193	22400	NA
p-Chloroaniline	R	10480	<12100	NA
p-Nitrotoluene	R	<3289	18200	NA
Cadmium	690	NA	700	NA
Chromium	10500	NA	24600	NA
Lead	8340	NA	15200	NA
Nickel	37600 J	NA	57600 J	NA

0 100 200

SCALE IN FEET

BORING	DEPTH	X
PARAMETER		Y

DEPTH BELOW GROUND
GROUND IN FEET
ANALYTICAL RESULTS IN ug/kg

FIGURE 4.7-1

BAYER CORPORATION
NEW MARTINSVILLE, WV FACILITY

SOIL BORING LOCATIONS WITH ANALYTICAL
RESULTS FOR SWMU 14

IT Corporation

DATE: 12/03/01	DR.: B. SNYDER
SCALE: AS NOTED	FILE NAME: 800588-A18

LE 4.7-1
Soil Analytical Results for SwMU 14: Fill Materials, Block 11

SAMPLE ID	SM014-TB01-0001	SM014-TB01-0305	SM014-TB01-1618	SM014-TB01-1618FD	SM014-TB02-0001	SM014-TB02-0103	SM014-TB02-0305
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	16.00-18.00	16.00-18.00	0.00-1.00	1.00-3.00	3.00-5.00
SAMPLE LOCATION	TB01	TB01	TB01	TB01	TB02	TB02	TB02
SAMPLE DATE	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997
PARAMETER							
Volatiles (µg/kg)							
1,1,1,2-Tetrachloroethane	< 262	< 299	< 302	< 302	< 285	NA	< 293
1,1,1-Trichloroethane	< 136	< 155	< 157	< 157	< 148	NA	< 152
1,1,2,2-Tetrachloroethane	< 136	< 155	< 157	< 157	< 148	NA	< 152
1,1,2-Trichloroethane	< 262	< 299	< 302	< 302	< 285	NA	< 293
1,1-Dichloroethane	< 136	< 155	< 157	< 157	< 148	NA	< 152
1,1-Dichloroethene	< 262	< 299	< 302	< 302	< 285	NA	< 293
1,1-Dichloropropene	< 136	< 155	< 157	< 157	< 148	NA	< 152
1,2,3-Trichlorobenzene (VOAS)	< 136	< 155	< 157	< 157	< 148	NA	< 152
1,2,3-Trichloropropane	< 136	< 155	< 157	< 157	< 148	NA	< 152
1,2,4-Trichlorobenzene (VOAS)	< 136	< 155	< 157	< 157	< 148	NA	< 152
1,2,4-Trimethylbenzene	< 136	< 155	< 157	< 157	< 148	NA	< 152
1,2-Dibromo-3-chloropropane	< 262	< 299	< 302	< 302	< 285	NA	< 293
1,2-Dibromoethane	< 136	< 155	< 157	< 157	< 148	NA	< 152
1,2-Dichlorobenzene (VOAS)	< 262	538 J	726 J	520 J	7310	NA	3750
1,2-Dichloroethane	< 262	< 299	< 302	< 302	< 285	NA	< 293
1,2-Dichloropropane	< 398	< 454	< 459	< 459	< 434	NA	< 445
1,3,5-Trimethylbenzene	< 136	< 155	< 157	< 157	< 148	NA	< 152
1,3-Dichlorobenzene (VOAS)	< 262	< 299	< 302	< 302	< 285	NA	< 293
1,3-Dichloropropane	< 136	< 155	< 157	< 157	< 148	NA	< 152
1,4-Dichlorobenzene (VOAS)	< 262	< 299	< 302	< 302	776	NA	399 J
2,2-Dichloropropane	< 136	< 155	< 157	< 157	< 148	NA	< 152
2-Butanone	< 921	< 1050	< 1060	< 1060	< 1000	NA	< 1030
2-Chloroethyl Vinyl Ether	< 262	< 299	< 302	< 302	< 285	NA	< 293
2-Chlorotoluene	< 136	< 155	< 157	< 157	< 148	NA	< 152
2-Hexanone	< 398	< 454	< 459	< 459	< 434	NA	< 445
4-Chlorotoluene	< 136	< 155	< 157	< 157	< 148	NA	< 152
4-Methyl-2-pentanone	< 398	< 454	< 459	< 459	< 434	NA	< 445
Acetone	< 921	< 1050	1200 J	< 1060	1830 J	NA	< 1030
Acrolein	< 2620	< 2990	< 3020	< 3020	< 2850	NA	< 2930
Acrylonitrile	< 1360	< 1550	< 1570	< 1570	< 1480	NA	< 1520
Allyl Chloride	< 136	< 155	< 157	< 157	< 148	NA	< 152
Benzene	< 136	< 155	< 157	< 157	< 148	NA	< 152
Bromobenzene	< 136	< 155	< 157	< 157	< 148	NA	< 152
Bromochloromethane	< 136	< 155	< 157	< 157	< 148	NA	< 152
Bromodichloromethane	< 262	< 299	< 302	< 302	< 285	NA	< 293
Bromoform	< 136	< 155	< 157	< 157	< 148	NA	< 152
Bromomethane	< 398	< 454	< 459	< 459	< 434	NA	< 445
Carbon Disulfide	< 398	< 454	< 459	< 459	< 434	NA	< 445
Carbon Tetrachloride	< 136	< 155	< 157	< 157	< 148	NA	< 152
Chlorobenzene	< 136	< 155	979	895	9360	NA	7030
Chloroethane	< 398	< 454	< 459	< 459	< 434	NA	< 445
Chloroform	< 136	< 155	< 157	< 157	< 148	NA	< 152

TABLE 4.7-1
Soil Analytical Results for SWMU 14: Fill Materials, Block 11

SAMPLE ID	SM014-TB01-0001	SM014-TB01-0305	SM014-TB01-1618	SM014-TB01-1618FD	SM014-TB02-0001	SM014-TB02-0103	SM014-TB02-0305
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	16.00-18.00	16.00-18.00	0.00-1.00	1.00-3.00	3.00-5.00
SAMPLE LOCATION	TB01	TB01	TB01	TB01	TB02	TB02	TB02
SAMPLE DATE	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997
PARAMETER							
Chloromethane	< 262	< 299	< 302	< 302	< 285	NA	< 293
Dibromochloromethane	< 136	< 155	< 157	< 157	< 148	NA	< 152
Dibromomethane	< 136	< 155	< 157	< 157	< 148	NA	< 152
Dichlorodifluoromethane	< 262	< 299	< 302	< 302	< 285	NA	< 293
Ethyl Methacrylate	< 136	< 155	< 157	< 157	< 148	NA	< 152
Ethylbenzene	< 136	< 155	< 157	< 157	< 148	NA	< 152
Freon 113	1150 J	824 JB	834 J	326 J	< 285	NA	504 J
Freon 141b	< 136	< 155	< 157	< 157	< 148	NA	< 152
Hexachlorobutadiene (VOAS)	< 262	< 299	< 302	< 302	< 285	NA	< 293
Isopropylbenzene	< 398	< 454	< 459	< 459	< 434	NA	< 445
Methyl Iodide	< 398	< 454	< 459	< 459	< 434	NA	< 445
Methylene Chloride	< 262	< 299	< 302	< 302	< 285	NA	< 293
Naphthalene (VOAS)	< 136	< 155	< 157	< 157	< 148	NA	< 152
Styrene	< 136	< 155	< 157	< 157	< 148	NA	< 152
Tetrachloroethene	< 136	< 155	< 157	< 157	< 148	NA	< 152
Toluene	< 136	< 155	< 157	< 157	< 148	NA	< 152
Trichloroethene	< 136	< 155	< 157	< 157	753	NA	< 152
Trichlorofluoromethane	< 262	< 299	< 302	< 302	< 285	NA	< 293
Vinyl Acetate	< 398	< 454	< 459	< 459	< 434	NA	< 445
Vinyl Chloride	< 262	< 299	< 302	< 302	< 285	NA	< 293
cis-1,2-Dichloroethene	< 262	< 299	< 302	< 302	< 285	NA	< 293
cis-1,3-Dichloropropene	< 136	< 155	< 157	< 157	< 148	NA	< 152
m+p-Xylene	< 136	< 155	< 157	< 157	< 148	NA	< 152
n-Butylbenzene	< 136	< 155	< 157	< 157	< 148	NA	< 152
n-Propylbenzene	< 136	< 155	< 157	< 157	< 148	NA	< 152
o-Xylene	< 136	< 155	< 157	< 157	< 148	NA	< 152
p-Isopropyltoluene	< 136	< 155	< 157	< 157	411 J	NA	< 152
sec-Butylbenzene	< 136	< 155	< 157	< 157	< 148	NA	< 152
tert-Butylbenzene	< 136	< 155	< 157	< 157	< 148	NA	< 152
trans-1,2-Dichloroethene	< 262	< 299	< 302	< 302	< 285	NA	< 293
trans-1,3-Dichloropropene	< 136	< 155	< 157	< 157	< 148	NA	< 152
trans-1,4-Dichloro-2-butene	< 1360	< 1550	< 1570	< 1570	< 1480	NA	< 1520
Semivolatiles (µg/kg)							
1,2,3-Trichlorobenzene (SVOA)	< 2510	< 2870	< 290	< 290	< 13700	NA	< 2810
1,2,4,5-Tetrachlorobenzene	< 2510	< 2870	< 290	< 290	< 13700	NA	< 2810
1,2,4-Trichlorobenzene (SVOA)	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
1,2-Dichlorobenzene (SVOA)	< 2090	8290	1860	1520	26300	NA	11600
1,3-Dichlorobenzene (SVOA)	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
1,4-Dichlorobenzene (SVOA)	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
1-Chloronaphthalene	< 5230	< 5970	< 600	< 600	< 28500	NA	< 5860
1-Methylnaphthalene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
1-Naphthylamine	< 7120	< 8120	< 820	< 820	< 38800	NA	< 7970

LE 4.7-1
Soil Analytical Results for SWMU 14: Fill Materials, Block 11

SAMPLE ID	SM014-TB01-0001	SM014-TB01-0305	SM014-TB01-1618	SM014-TB01-1618FD	SM014-TB02-0001	SM014-TB02-0103	SM014-TB02-0305
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	16.00-18.00	16.00-18.00	0.00-1.00	1.00-3.00	3.00-5.00
SAMPLE LOCATION	TB01	TB01	TB01	TB01	TB02	TB02	TB02
SAMPLE DATE	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997
PARAMETER							
2,3,4,6-Tetrachlorophenol	< 4190	< 4780	< 480	< 480	< 22800	NA	< 4690
2,3-Dichloroaniline	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
2,4,5-Trichlorophenol	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
2,4,6-Trichlorophenol	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
2,4-Dichlorophenol	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
2,4-Dimethylphenol	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
2,4-Dinitrophenol	< 13000	< 14800	< 1500	< 1500	< 70800	NA	< 14500
2,4-Dinitrotoluene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
2,4-Toluenediamine	< 10500	< 12000	< 1210	< 1210	< 57100	NA	< 11700
2,6-Dichlorophenol	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
2,6-Dinitrotoluene	< 2090	< 2390	460	< 240	< 11400	NA	< 2340
2-Choronaphthalene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
2-Chlorophenol	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
2-Methylnaphthalene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
2-Naphthylamine	< 7960	< 9080	< 920	< 920	< 43400	NA	< 8910
2-Nitroaniline	< 2510	< 2870	< 290	< 290	< 13700	NA	< 2810
2-Nitrodiphenylamine	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
2-Nitrophenol	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
2-Picoline	< 7750	< 8840	< 890	< 890	< 42200	NA	< 8680
3,3'-Dichlorobenzidine	< 12800	< 14600	< 1480	< 1480	< 69600	NA	< 14300
3-Methylcholanthrene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
3-Nitroaniline	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
4,4' Methyleneedianiline	< 18400	< 21000	< 2130	< 2130	< 100000	NA	< 20600
4,6-Dinitro-o-cresol	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
4-Aminobiphenyl	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
4-Aminodiphenylamine	< 5230	< 5970	< 600	< 600	< 28500	NA	< 5860
4-Bromophenyl phenyl ether	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
4-Chloro-m-cresol	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
4-Chlorophenylphenyl ether	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
4-Nitroaniline	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
4-Nitrophenol	< 2090 J	< 2390 J	< 240 J	< 240 J	< 11400 J	NA	< 2340 J
5-Nitro-o-tolididine	< 2090	< 2390	300	< 240	< 11400	NA	< 2340
7,12-dimethylbenz[a]anthracene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Acenaphthene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Acenaphthylene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Acetophenone	< 2720	< 3110	< 310	< 310	< 14800	NA	< 3050
Aniline	< 2930	< 3350	< 340	< 340	< 16000	NA	< 3280
Anthracene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Azobenzene	< 2510	< 2870	< 290	< 290	< 13700	NA	< 2810
Benzidine	< 33500	< 38200	< 3870	< 3870	< 183000	NA	< 37500
Benzo(a)anthracene	< 2720	< 3110	< 310	< 310	< 14800	NA	< 3050
Benzo(a)pyrene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340

TABLE 4.7-1
Soil Analytical Results for SWMU 14: Fill Materials, Block 11

SAMPLE ID	SM014-TB01-0001	SM014-TB01-0305	SM014-TB01-1618	SM014-TB01-1618FD	SM014-TB02-0001	SM014-TB02-0103	SM014-TB02-0305
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	16.00-18.00	16.00-18.00	0.00-1.00	1.00-3.00	3.00-5.00
SAMPLE LOCATION	TB01	TB01	TB01	TB01	TB02	TB02	TB02
SAMPLE DATE	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997
PARAMETER							
Benzo(b)fluoranthene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Benzo(ghi)perylene	< 2300	< 2630	< 270	< 270	< 12600	NA	< 2580
Benzo(k)fluoranthene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Benzoic Acid	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Benzyl Alcohol	2780	< 2390	< 240	< 240	< 11400	NA	< 2340
Benzyl butyl phthalate	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Bis(2-chloroethoxymethane)	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Bis(2-chloroethyl)ether	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Bis(2-chloroisopropyl)ether	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Bis(2-ethylhexyl) phthalate	< 2510 J	< 2870 J	< 290 J	670 J	< 13700 J	NA	< 2810 J
Bisphenol A	< 3770	< 4300	960	1350	115000	NA	37100
Carbazole	< 10500	< 12000	< 1210	< 1210	< 57100	NA	< 11700
Chrysene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Cyclohexanone	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Di-n-butyl phthalate	2600 J	6740 J	9670 J	4400 J	< 11400 J	NA	< 2340 J
Di-n-octyl phthalate	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Dibenzo(a,h)anthracene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Dibenzofuran	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Diethyl Phthalate	< 2090	< 2390	290	< 240	< 11400	NA	< 2340
Dimethylphthalate	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Ethyl Methane Sulfonate	< 3770	< 4300	< 440	< 440	< 20600	NA	< 4220
Fluoranthene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Fluorene	< 2090 J	< 2390 J	< 240 J	< 240 J	< 11400 J	NA	< 2340 J
Heptachlor	< 2300	< 2630	< 270	< 270	< 12600	NA	< 2580
Hexachlorobenzene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Hexachlorobutadiene (SVOA)	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Hexachlorocyclopentadiene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Hexachloroethane	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Indeno(1,2,3-cd)pyrene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Isophorone	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Methyl methane sulfonate	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
N-Nitrosodibutylamine	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
N-Nitrosodimethylamine	< 2090 J	< 2390 J	< 240 J	< 240 J	< 11400 J	NA	< 2340 J
N-Nitrosodiphenylamine	< 2720	< 3110	< 310	< 310	< 14800	NA	< 3050
N-Nitrosodipropylamine	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
N-Nitrosopiperidine	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Naphthalene (SVOA)	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Nitrobenzene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Pentachlorobenzene	< 3560	< 4060	< 410	< 410	< 19400	NA	< 3990
Pentachloronitrobenzene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Pentachlorophenol	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Phenacetin	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340

LE 4.7-1
Soil Analytical Results
WMU 14: Fill Materials, Block 11

SAMPLE ID	SM014-TB01-0001	SM014-TB01-0305	SM014-TB01-1618	SM014-TB01-1618FD	SM014-TB02-0001	SM014-TB02-0103	SM014-TB02-0305
SAMPLE DEPTH(R)	0.00-1.00	3.00-5.00	16.00-18.00	16.00-18.00	0.00-1.00	1.00-3.00	3.00-5.00
SAMPLE LOCATION	TB01	TB01	TB01	TB01	TB02	TB02	TB02
SAMPLE DATE	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997	6/26/1997
PARAMETER							
Phenanthrene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Phenol	< 1260	< 1430	< 150	< 150	< 6850	NA	< 1410
Pyrene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Pyridine	< 2300	< 2630	< 270	< 270	< 12600	NA	< 2580
Trimethylphosphate	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
Triphenylphosphate	< 10500	< 12000	< 1210	< 1210	< 57100	NA	< 11700
m,p-Cresol	< 3140	< 3580	< 360	< 360	< 17100	NA	< 3520
m-Nitrotoluene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
m-Toluidine	< 4190	< 4780	< 480	< 480	< 22800	NA	< 4690
o,p-Toluidine	< 10700	< 12200	< 1230	< 1230	< 58200	NA	< 12000
o-Cresol	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
o-Nitrotoluene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
p-Chloroaniline	< 2090	< 2390	< 240	< 240	< 11400	NA	3210
p-Dimethylaminoazobenzene	< 2090	< 2390	< 240	< 240	< 11400	NA	< 2340
p-Nitrotoluene	< 3140	< 3580	< 360	< 360	< 17100	NA	< 3520
Metals ($\mu\text{g/kg}$)							
Antimony	< 419	< 478	< 484	< 484	< 457	NA	< 469
Cadmium	< 420	< 480	730	< 480	< 460	NA	< 470
Chromium	6160	19600	15800	16500	18400	NA	17200
Lead	4090	19200	13700	13400	11400	NA	22100
Nickel	12100 J	53300 J	15400 J	12700 J	50100 J	NA	40500 J
Miscellaneous ($\mu\text{g/kg}$)							
Percent Moisture	4.5 %	16 %	17 %	NA	12 %	17 %	15 %
Total Organic Carbon	NA	NA	NA	NA	NA	7300000 J	R
BTU from ECD	NA	NA	NA	NA	NA	NA	< 500 BTU
Ignitability (Flash Point) for S	NA	NA	NA	NA	NA	NA	Negative
Percent Ash	NA	NA	NA	NA	NA	NA	65 %

B=Blank Contamination

J=Estimated Value

NA=Not Analyzed

R=Data Rejected for Quality Control Reasons

TABLE 4.7-1
Soil Analytical Results for SWMU 14: Fill Materials, Block 11

SAMPLE ID	SM014-TB02-1519	SM014-TB03-0001	SM014-TB03-0001R	SM014-TB03-0305	SM014-TB03-0305RS	SM014-TB03-1921
SAMPLE DEPTH(ft)	15.00-19.00	0.00-1.00	0.00-1.00	3.00-5.00	3.00-5.00	19.00-21.00
SAMPLE LOCATION	TB02	TB03	TB03	TB03	TB03	TB03
SAMPLE DATE	6/26/1997	6/26/1997	2/23/1998	6/26/1997	7/17/1997	6/26/1997
PARAMETER						
Volatiles (µg/kg)						
1,1,1,2-Tetrachloroethane	< 309	< 273	NA	NA	< 301	< 266
1,1,1-Trichloroethane	< 161	< 142	NA	NA	< 157	< 138
1,1,2,2-Tetrachloroethane	< 161	< 142	NA	NA	< 157	< 138
1,1,2-Trichloroethane	< 309	< 273	NA	NA	< 301	< 266
1,1-Dichloroethane	< 161	< 142	NA	NA	< 157	< 138
1,1-Dichloroethene	< 309	< 273	NA	NA	< 301	< 266
1,1-Dichloropropene	< 161	< 142	NA	NA	< 157	< 138
1,2,3-Trichlorobenzene (VOAS)	< 161	< 142	NA	NA	< 157	< 138
1,2,3-Trichloropropane	< 161	< 142	NA	NA	< 157	< 138
1,2,4-Trichlorobenzene (VOAS)	< 161	< 142	NA	NA	< 157	< 138
1,2,4-Trimethylbenzene	< 161	< 142	NA	NA	< 157	< 138
1,2-Dibromo-3-chloropropane	< 309	< 273	NA	NA	< 301	< 266
1,2-Dibromoethane	< 161	< 142	NA	NA	< 157	< 138
1,2-Dichlorobenzene (VOAS)	91600	960	NA	NA	< 301	308 J
1,2-Dichloroethane	< 309	< 273	NA	NA	< 301	< 266
1,2-Dichloropropane	< 470	< 415	NA	NA	< 458	< 404
1,3,5-Trimethylbenzene	< 161	< 142	NA	NA	< 157	< 138
1,3-Dichlorobenzene (VOAS)	< 309	< 273	NA	NA	< 301	< 266
1,3-Dichloropropene	< 161	< 142	NA	NA	< 157	< 138
1,4-Dichlorobenzene (VOAS)	8420	< 273	NA	NA	< 301	< 266
2,2-Dichloropropane	< 161	< 142	NA	NA	< 157	< 138
2-Butanone	< 1090	< 960	NA	NA	< 1060	< 935
2-Chloroethyl Vinyl Ether	< 309	< 273	NA	NA	< 301	< 266
2-Chlorotoluene	< 161	< 142	NA	NA	< 157	< 138
2-Hexanone	< 470	< 415	NA	NA	< 458	< 404
4-Chlorotoluene	< 161	< 142	NA	NA	< 157	< 138
4-Methyl-2-pentanone	< 470	< 415	NA	NA	< 458	< 404
Acetone	< 1090	< 960	NA	NA	< 1060	< 935
Acrolein	< 3090	< 2730	NA	NA	< 3010	< 2660
Acrylonitrile	< 1610	< 1420	NA	NA	< 1570	< 1380
Allyl Chloride	< 161	< 142	NA	NA	< 157	< 138
Benzene	520 J	< 142	NA	NA	< 157	< 138
Bromobenzene	< 161	< 142	NA	NA	< 157	< 138
Bromochloromethane	< 161	< 142	NA	NA	< 157	< 138
Bromodichloromethane	< 309	< 273	NA	NA	< 301	< 266
Bromoform	< 161	< 142	NA	NA	< 157	< 138
Bromomethane	< 470	< 415	NA	NA	< 458	< 404
Carbon Disulfide	< 470	< 415	NA	NA	< 458	< 404
Carbon Tetrachloride	< 161	< 142	NA	NA	< 157	< 138
Chlorobenzene	13600	796	NA	NA	301 J	245 J
Chloroethane	< 470	< 415	NA	NA	< 458	< 404
Chloroform	< 161	< 142	NA	NA	< 157	< 138

LE 4.7-1
Soil Analytical Results for VMU 14: Fill Materials, Block 11

SAMPLE ID	SM014-TB02-1519	SAMPLE DEPTH(ft)	15.00-19.00	SAMPLE LOCATION	SM014-TB03-0001	SAMPLE DATE	0.00-1.00	PARAMETER	SM014-TB03-0001R	SM014-TB03-0305	SM014-TB03-0305RS	SM014-TB03-1921
		TB02			TB03				TB03	3.00-5.00	3.00-5.00	19.00-21.00
		6/26/1997			6/26/1997				2/23/1998	6/26/1997	7/17/1997	TB03
												6/26/1997
Chloromethane	< 309		< 273		NA		NA		NA	< 301		< 266
Dibromochloromethane	< 161		< 142		NA		NA		NA	< 157		< 138
Dibromomethane	< 161		< 142		NA		NA		NA	< 157		< 138
Dichlorodifluoromethane	< 309		< 273		NA		NA		NA	< 301		< 266
Ethyl Methacrylate	< 161		< 142		NA		NA		NA	< 157		< 138
Ethylbenzene	< 161		< 142		NA		NA		NA	< 157		< 138
Freon 113	334 J		< 273		NA		NA		NA	< 301		500 J
Freon 141b	< 161		< 142		NA		NA		NA	< 157		< 138
Hexachlorobutadiene (VOAS)	< 309		< 273		NA		NA		NA	< 301		< 266
Isopropylbenzene	< 470		< 415		NA		NA		NA	< 458		< 404
Methyl Iodide	< 470		< 415		NA		NA		NA	< 458		< 404
Methylene Chloride	< 309		< 273		NA		NA		NA	< 301		< 266
Naphthalene (VOAS)	< 161		< 142		NA		NA		NA	< 157		< 138
Styrene	< 161		< 142		NA		NA		NA	< 157		< 138
Tetrachloroethene	< 161		< 142		NA		NA		NA	< 157		< 138
Toluene	1360		< 142		NA		NA		NA	< 157		< 138
Trichloroethene	< 161		< 142		NA		NA		NA	< 157		< 138
Trichlorofluoromethane	< 309		< 273		NA		NA		NA	< 301		< 266
Vinyl Acetate	< 470		< 415		NA		NA		NA	< 458		< 404
Vinyl Chloride	< 309		< 273		NA		NA		NA	< 301		< 266
cis-1,2-Dichloroethene	< 309		< 273		NA		NA		NA	< 301		< 266
cis-1,3-Dichloropropene	< 161		< 142		NA		NA		NA	< 157		< 138
m+p-Xylene	< 161		< 142		NA		NA		NA	< 157		< 138
n-Butylbenzene	< 161		< 142		NA		NA		NA	< 157		< 138
n-Propylbenzene	< 161		< 142		NA		NA		NA	< 157		< 138
o-Xylene	< 161		< 142		NA		NA		NA	< 157		< 138
p-Isopropyltoluene	842		< 142		NA		NA		NA	< 157		< 138
sec-Butylbenzene	< 161		< 142		NA		NA		NA	< 157		< 138
tert-Butylbenzene	< 161		< 142		NA		NA		NA	< 157		< 138
trans-1,2-Dichloroethene	< 309		< 273		NA		NA		NA	< 301		< 266
trans-1,3-Dichloropropene	< 161		< 142		NA		NA		NA	< 157		< 138
trans-1,4-Dichloro-2-butene	< 1610		< 1420		NA		NA		NA	< 1570		< 1380
Semivolatiles ($\mu\text{g}/\text{kg}$)												
1,2,3-Trichlorobenzene (SVOA)	< 5940		R		< 2631		< 14500		NA		< 2550	
1,2,4,5-Tetrachlorobenzene	< 5940		R		< 2631		< 14500		NA		< 2550	
1,2,4-Trichlorobenzene (SVOA)	< 4950		R		< 2193		< 12100		NA		< 2130	
1,2-Dichlorobenzene (SVOA)	252000		R		2236		339000		NA		< 2130	
1,3-Dichlorobenzene (SVOA)	< 4950		R		< 2193		< 12100		NA		< 2130	
1,4-Dichlorobenzene (SVOA)	25600		R		< 2193		28400		NA		< 2130	
1-Chloronaphthalene	< 12400		R		< 5481		< 30100		NA		< 5320	
1-Methylnaphthalene	< 4950		R		< 2193		< 12100		NA		< 2130	
1-Naphthylamine	< 16800		R		< 7455		< 41000		NA		< 7230	

TABLE 4.7-1
Soil Analytical Results for SWMU 14: Fill Materials, Block 11

SAMPLE ID	SM014-TB02-1519	SM014-TB03-0001	SM014-TB03-0001R	SM014-TB03-0305	SM014-TB03-0305RS	SM014-TB03-1921
SAMPLE DEPTH(ft)	15.00-19.00	0.00-1.00	0.00-1.00	3.00-5.00	3.00-5.00	19.00-21.00
SAMPLE LOCATION	TB02	TB03	TB03	TB03	TB03	TB03
SAMPLE DATE	6/26/1997	6/26/1997	2/23/1998	6/26/1997	7/17/1997	6/26/1997
PARAMETER						
2,3,4,6-Tetrachlorophenol	< 9900	R	< 4385	< 24100	NA	< 4250
2,3-Dichloroaniline	< 4950	R	< 2193	< 12100	NA	< 2130
2,4,5-Trichlorophenol	< 4950	R	< 2193	< 12100	NA	< 2130
2,4,6-Trichlorophenol	< 4950	R	< 2193	< 12100	NA	< 2130
2,4-Dichlorophenol	< 4950	R	< 2193	< 12100	NA	< 2130
2,4-Dimethylphenol	< 4950	R	< 2193	< 12100	NA	< 2130
2,4-Dinitrophenol	< 30700	R	< 13593	< 74700	NA	< 13200
2,4-Dinitrotoluene	< 4950	R	< 2193	78000	NA	< 2130
2,4-Toluenediamine	< 24800	R	< 10962	< 60200	NA	< 10600
2,6-Dichlorophenol	< 4950	R	< 2193	< 12100	NA	< 2130
2,6-Dinitrotoluene	< 4950	R	< 2193	17700	NA	< 2130
2-Choronaphthalene	< 4950	R	< 2193	< 12100	NA	< 2130
2-Chlorophenol	< 4950	R	< 2193	< 12100	NA	< 2130
2-Methylnaphthalene	< 4950	R	< 2193	< 12100	NA	< 2130
2-Naphthylamine	< 18800	R	< 8332	< 45800	NA	< 8080
2-Nitroaniline	< 5940	R	< 2631	< 14500	NA	< 2550
2-Nitrodiphenylamine	< 4950	R	< 2193	< 12100	NA	< 2130
2-Nitrophenol	< 4950	R	< 2193	< 12100	NA	< 2130
2-Picoline	< 18300	R	< 8112	< 44600	NA	< 7870
3,3'-Dichlorobenzidine	< 30200	R	< 13374	< 73500	NA	< 13000
3-Methylcholanthrene	< 4950	R	< 2193	< 12100	NA	< 2130
3-Nitroaniline	< 4950	R	< 2193	< 12100	NA	< 2130
4,4'-Methylenedianiline	< 43600	R	< 19294	< 106000	NA	< 18700
4,6-Dinitro-o-cresol	< 4950	R	< 2193	< 12100	NA	< 2130
4-Aminobiphenyl	< 4950	R	< 2193	< 12100	NA	< 2130
4-Aminodiphenylamine	< 12400	R	< 5481	< 30100	NA	< 5320
4-Bromophenyl phenyl ether	< 4950	R	< 2193	< 12100	NA	< 2130
4-Chloro-m-cresol	< 4950	R	< 2193	< 12100	NA	< 2130
4-Chlorophenylphenyl ether	< 4950	R	< 2193	< 12100	NA	< 2130
4-Nitroaniline	< 4950	R	< 2193	< 12100	NA	< 2130
4-Nitrophenol	< 4950 J	R	< 2193	< 12100 J	NA	< 2130 J
5-Nitro-o-toluidine	< 4950	R	< 2193	< 12100	NA	< 2130
7,12-dimethylbenz[a]anthracene	< 4950	R	< 2193	< 12100	NA	< 2130
Acenaphthene	< 4950	R	< 2193	< 12100	NA	< 2130
Acenaphthylene	< 4950	R	< 2193	< 12100	NA	< 2130
Acetophenone	< 6440	R	< 2850	< 15700	NA	< 2760
Aniline	12000 B	R	< 3070	30700	NA	< 2980
Anthracene	< 4950	R	< 2193	< 12100	NA	< 2130
Azobenzene	< 5940	R	< 2631	< 14500	NA	< 2550
Benzidine	< 79200	R	< 35080 J	< 193000	NA	< 34000
Benzo(a)anthracene	< 6440	R	< 2850	< 15700	NA	< 2760
Benzo(a)pyrene	< 4950	R	< 2193	< 12100	NA	< 2130

LE 4.7-1
Soil Analytical Results for SWMU 14: Fill Materials, Block 11

SAMPLE ID	SM014-TB02-1519	SAMPLE DEPTH(1)	15.00-19.00	SAMPLE LOCATION	SM014-TB03-0001	SAMPLE DATE	0.00-1.00	PARAMETER	SM014-TB03-0001R	SAMPLE ID	SM014-TB03-0305	SAMPLE DEPTH(1)	0.00-1.00	SAMPLE LOCATION	SM014-TB03-0305RS	SAMPLE DATE	3.00-5.00	PARAMETER	SM014-TB03-1921
		TB02			TB03				TB03		TB03			TB03					
		6/26/1997			6/26/1997				2/23/1998		6/26/1997			7/17/1997					
Benzo(b)fluoranthene	< 4950	R			< 2193				< 12100		NA			< 2130					
Benzo(ghi)perylene	< 5450	R			< 2412				< 13300		NA			< 2340					
Benzo(k)fluoranthene	< 4950	R			< 2193				< 12100		NA			< 2130					
Benzoic Acid	< 4950	R			< 2193				< 12100		NA			< 2130					
Benzyl Alcohol	< 4950	R			< 2193				< 12100		NA			< 2130					
Benzyl butyl phthalate	< 4950	R			< 2193				< 12100		NA			< 2130					
Bis(2-chloroethoxyethane)	< 4950	R			< 2193				< 12100		NA			< 2130					
Bis(2-chloroethyl)ether	< 4950	R			< 2193				< 12100		NA			< 2130					
Bis(2-chloroisopropyl)ether	< 4950	R			< 2193 J				< 12100		NA			< 2130					
Bis(2-ethylhexyl) phthalate	< 5940 J	R			< 2631 J				< 14500 J		NA			< 2550 J					
Bisphenol A	132000	R			< 3947 J				253000		NA			< 3830					
Carbazole	< 24800	R			< 10962				< 60200		NA			< 10600					
Chrysene	< 4950	R			< 2193				< 12100		NA			< 2130					
Cyclohexanone	< 4950	R			< 2193				< 12100		NA			< 2130					
Di-n-butyl phthalate	< 4950 J	R			< 2193				< 12100 J		NA			56300 J					
Di-n-octyl phthalate	< 4950	R			< 2193				< 12100		NA			< 2130					
Dibenzo(a,h)anthracene	< 4950	R			< 2193				< 12100		NA			< 2130					
Dibenzofuran	< 4950	R			< 2193				< 12100		NA			< 2130					
Diethyl Phthalate	< 4950	R			< 2193				< 12100		NA			< 2130					
Dimethylphthalate	< 4950	R			< 2193				< 12100		NA			< 2130					
Ethyl Methane Sulfonate	< 8910	R			< 3947				< 21700		NA			< 3830					
Fluoranthene	< 4950	R			< 2193				< 12100		NA			< 2130					
Fluorene	< 4950 J	R			< 2193				< 12100 J		NA			< 2130 J					
Heptachlor	< 5450	R			< 2412				< 13300		NA			< 2340					
Hexachlorobenzene	< 4950	R			< 2193				< 12100		NA			< 2130					
Hexachlorobutadiene (SVOA)	< 4950	R			< 2193				< 12100		NA			< 2130					
Hexachlorocyclopentadiene	< 4950	R			< 2193				< 12100		NA			< 2130					
Hexachloroethane	< 4950	R			< 2193				< 12100		NA			< 2130					
Indeno(1,2,3-cd)pyrene	< 4950	R			< 2193				< 12100		NA			< 2130					
Isophorone	< 4950	R			< 2193				< 12100		NA			< 2130					
Methyl methane sulfonate	< 4950	R			< 2193				< 12100		NA			< 2130					
N-Nitrosodibutylamine	< 4950	R			< 2193				< 12100		NA			< 2130					
N-Nitrosodimethylamine	< 4950 J	R			< 2193				< 12100 J		NA			< 2130 J					
N-Nitrosodiphenylamine	< 6440	R			< 2850				< 15700		NA			< 2760					
N-Nitrosodipropylamine	< 4950	R			< 2193				< 12100		NA			< 2130					
N-Nitrosopiperidine	< 4950	R			< 2193				< 12100		NA			< 2130					
Naphthalene (SVOA)	< 4950	R			< 2193				< 12100		NA			< 2130					
Nitrobenzene	< 4950	R			< 2193				23500		NA			< 2130					
Pentachlorobenzene	< 8420	R			< 3727				< 20500		NA			< 3610					
Pentachloronitrobenzene	< 4950	R			< 2193				< 12100		NA			< 2130					
Pentachlorophenol	< 4950	R			< 2193				< 12100		NA			< 2130					
Phenacetin	< 4950	R			< 2193				< 12100		NA			< 2130					

TABLE 4.7-1
Soil Analytical Results for SWMU 14: Fill Materials, Block 11

SAMPLE ID	SM014-TB02-1519	SAMPLE DEPTH(ft)	15.00-19.00	SAMPLE LOCATION	SM014-TB03-0001	SAMPLE DATE	0.00-1.00	PARAMETER	SM014-TB03-0001R	SM014-TB03-0305	SM014-TB03-0305RS	SM014-TB03-1921
Phenanthrene	< 4950		R		< 2193			< 12100		NA		< 2130
Phenol	< 2970		R		< 1316			< 7230		NA		4250
Pyrene	< 4950		R		< 2193			< 12100		NA		< 2130
Pyridine	< 5450		R		< 2412			< 13300		NA		< 2340
Trimethylphosphate	< 4950		R		< 2193			< 12100		NA		< 2130
Triphenylphosphate	< 24800		R		< 10962			< 60200		NA		< 10600
m,p-Cresol	< 7430		R		< 3289			< 18100		NA		< 3190
m-Nitrotoluene	< 4950		R		< 2193			< 12100		NA		< 2130
m-Toluidine	< 9900		R		< 4385			< 24100		NA		< 4250
o,p-Toluidine	< 25300		R		< 11181			< 61500		NA		< 10800
o-Cresol	< 4950		R		< 2193			< 12100		NA		< 2130
o-Nitrotoluene	< 4950		R		< 2193			22400		NA		< 2130
p-Chloroaniline	< 4950		R		10480			< 12100		NA		< 2130
p-Dimethylaminoazobenzene	< 4950		R		< 2193			< 12100		NA		< 2130
p-Nitrotoluene	< 7430		R		< 3289			18200		NA		< 3190
Metals (µg/kg)												
Antimony	< 495		< 436		NA			< 482		NA		< 425
Cadmium	920		690		NA			700		NA		870
Chromium	21800		10500		NA			24600		NA		19800
Lead	23600		8340		NA			15200		NA		15900
Nickel	82200 J		37600 J		NA			57600 J		NA		30500 J
Miscellaneous (µg/kg)												
Percent Moisture	19 %		8.3 %		8.8 %			17 %		NA		5.9 %
Total Organic Carbon	NA		NA		NA			NA		NA		NA
BTU from ECD	NA		NA		NA			NA		NA		NA
Ignitability (Flash Point) for S	NA		NA		NA			NA		NA		NA
Percent Ash	NA		NA		NA			NA		NA		NA

B=Blank Contamination

J=Estimated Value

NA=Not Analyzed

R=Data Rejected for Quality Contr

TABLE 4.7-2
Comparison to Risk-Based Criteria
SWMU 14: Fill Materials Block 11

Constituent	Maximum Detected Concentration (mg/kg) (1)	Maximum Detection Limit for Non-Detects (mg/kg)	Frequency of Detection	EPA Region III Risk-Based Concentrations for Soil (mg/kg)		USEPA Soil Screening Level (mg/kg)	Maximum Detection Exceeds Criteria	Maximum Detection Limit for Non-Detects Exceeds Criteria
				Industrial	Residential			
MISCELLANEOUS								
BTU from ECD	ND (2)	< 500	0 / 1	--	--	--	No	No
Ignitability (degrees)	ND	NA (3)	1 / 1	--	--	--	No	No
Total Organic Carbon	7300 J (4)	NA	1 / 1	--	--	--	No	No
METALS								
Cadmium	0.92	< 0.48	5 / 9	1000	39	8	No	No
Chromium	24.6	NA	9 / 9	10000	390	38	No	No
Lead	23.6	NA	9 / 9	800	400	--	No	No
Nickel	82.2 J	NA	9 / 9	41000	1600	130	No	No
VOLATILES								
1,1,2-Tetrachloroethane	ND	< 0.16	0 / 9	29	3.2	0.003	No	> SSL
1,1,2-Trichloroethane	ND	< 0.31	0 / 9	100	11	0.02	No	> SSL
1,1-Dichloroethene	ND	< 0.31	0 / 9	9.5	1.1	0.06	No	> SSL
1,2,3-Trichloropropane	ND	< 0.16	0 / 9	0.82	0.091	--	No	> RES
1,2-Dibromoethane	ND	< 0.16	0 / 9	0.067	0.0075	--	No	> IND, RES
1,2-Dichloroethane	ND	< 0.31	0 / 9	63	7	0.02	No	> SSL
1,2-Dichloropropane	ND	< 0.47	0 / 9	84	9.4	0.03	No	> SSL
Acetone	1.83 J	< 1.09	2 / 9	200000	7800	16	No	No
Acrylonitrile	ND	< 1.61	0 / 9	11	1.2	--	No	> RES
Benzene	0.52 J	< 0.16	1 / 9	200	22	0.03	> SSL	> SSL
Bromomethane	ND	< 0.47	0 / 9	2900	110	0.2	No	> SSL
Carbon Tetrachloride	ND	< 0.16	0 / 9	44	4.9	0.07	No	> SSL
Chlorobenzene	13.6	< 0.16	7 / 9	41000	1600	1	> SSL	No
cis-1,3-Dichloropropene	ND	< 0.16	0 / 9	33	3.7	0.004	No	> SSL
Freon 113	1.15 J	< 0.3	6 / 9	410000	16000	--	No	No
Methylene Chloride	ND	< 0.31	0 / 9	760	85	0.02	No	> SSL
p-Isopropyltoluene	0.84	< 0.16	2 / 9	--	--	--	No	No
Tetrachloroethene	ND	< 0.16	0 / 9	110	12	0.06	No	> SSL
Toluene	1.36	< 0.16	1 / 9	410000	16000	12	No	No
trans-1,3-Dichloropropene	ND	< 0.16	0 / 9	33	3.7	0.004	No	> SSL
Trichloroethene	0.75	< 0.16	1 / 9	520	58	0.06	> SSL	> SSL
Vinyl Chloride	ND	< 0.31	0 / 9	3	0.34	0.01	No	> SSL
SEMOVOLATILES								
1,2,3-Trichlorobenzene	ND	< 14.5	0 / 10	20000	780	5	No	> SSL
1,2,4-Trichlorobenzene	ND	< 12.1	0 / 10	20000	780	5	No	> SSL
1,2-Dichlorobenzene	339	< 2.13	7 / 10	180000	7000	17	> SSL	No
1,4-Dichlorobenzene	28.4	< 11.4	2 / 10	240	27	2	> RES, SSL	> SSL
1-Naphthylamine	ND	< 41	0 / 9	0.044	0.0049	--	No	> IND, RES
2,4,6-Trichlorophenol	ND	< 12.1	0 / 9	520	58	0.2	No	> SSL

TABLE 4.7-2
Comparison to Risk-Based Criteria
SWMU 14: Fill Materials Block 11

Constituent	Maximum Detected Concentration (mg/kg) (1)	Maximum Detection Limit for Non-Detects (mg/kg)	Frequency of Detection	EPA Region III Risk-Based Concentrations for Soil (mg/kg)		USEPA Soil Screening Level (mg/kg)	Maximum Detection Exceeds Criteria	Maximum Detection Limit for Non-Detects Exceeds Criteria
				Industrial	Residential			
SEMOVOLATILES (cont.)								
2,4-Dichlorophenol	ND	< 12.1	0/9	6100	230	1	No	> SSL
2,4-Dimethylphenol	ND	< 12.1	0/9	41000	1600	9	No	> SSL
2,4-Dinitrophenol	ND	< 74.7	0/9	4100	160	0.3	No	> SSL
2,4-Dinitrotoluene	78	< 11.4	1/9	4100	160	0.0008	> SSL	> SSL
2,4-Toluenediamine	ND	< 60.2	0/9	1.8	0.2	--	No	> IND, RES
2,6-Dinitrotoluene	17.7	< 11.4	2/9	2000	78	0.0007	> SSL	> SSL
2-Chlorophenol	ND	< 12.1	0/9	10000	390	4	No	> SSL
2-Naphthylamine	ND	< 45.8	0/9	0.044	0.0049	--	No	> IND, RES
2-Nitroaniline	ND	< 14.5	0/9	120	4.7	--	No	> RES
3,3'-Dichlorobenzidine	ND	< 73.5	0/9	13	1.4	0.007	No	> IND, RES, SSL
4,6-Dinitro-o-cresol	ND	< 12.1	0/9	200	7.8	--	No	> RES
5-Nitro-o-toluidine	0.3	< 12.1	1/9	170	19	--	No	No
Aniline	30.7	< 16	2/9	1000	110	--	No	No
Azobenzene	ND	< 14.5	0/9	52	5.8	--	No	> RES
Benzidine	ND	< 193	0/9	0.025	0.0028	--	No	> IND, RES
Benzo(a)anthracene	ND	< 15.7	0/9	7.8	0.88	2	No	> IND, RES, SSL
Benzo(a)pyrene	ND	< 12.1	0/8	0.78	0.088	8	No	> IND, RES, SSL
Benzo(b)fluoranthene	ND	< 12.1	0/8	7.8	0.88	5	No	> IND, RES, SSL
Benzo(k)fluoranthene	ND	< 12.1	0/9	78	8.8	49	No	> RES
Benzyl Alcohol	2.78	< 12.1	1/9	610000	23000	--	No	No
Bis(2-chloroethyl)ether	ND	< 12.1	0/9	5.2	0.58	0.0004	No	> IND, RES, SSL
Bis(2-chloroisopropyl)ether	ND	< 12.1	0/8	82	9.1	--	No	> RES
Bis(2-ethylhexyl) phthalate	0.67 J	< 14.5	1/9	410	46	3600	No	No
Bisphenol A	253	< 4.3	5/9	100000	3900	--	No	No
Carbazole	ND	< 60.2	0/9	290	32	0.6	No	> RES, SSL
Di-n-butyl phthalate	56.3 J	< 12.1	4/9	200000	7800	2300	No	No
Dibenzo(a,h)anthracene	ND	< 12.1	0/8	0.78	0.088	2	No	> IND, RES, SSL
Diethyl Phthalate	0.29	< 12.1	1/9	1000000	63000	470	No	No
Heptachlor	ND	< 13.3	0/9	1.3	0.14	23	No	> IND, RES
Hexachlorobenzene	ND	< 12.1	0/9	3.6	0.4	2	No	< IND, RES, SSL
Hexachlorobutadiene	ND	< 12.1	0/10	73	8.2	2	No	> RES, SSL
Hexachloroethane	ND	< 12.1	0/8	410	46	0.5	No	> SSL
Indeno(1,2,3-cd)pyrene	ND	< 12.1	0/8	7.8	0.88	14	No	> IND, RES
Isophorone	ND	< 12.1	0/9	6000	670	0.5	No	> SSL
m-Toluidine	ND	< 24.1	0/9	30	3.4	--	No	> RES
N-Nitrosodibutylamine	ND	< 12.1	0/9	1.1	0.12	--	No	> IND, RES
N-Nitrosodimethylamine	ND	< 12.1	0/9	0.11	0.013	--	No	> IND, RES
N-Nitrosodiphenylamine	ND	< 15.7	0/9	1200	130	1	No	> SSL

LE 4.7-2
Comparison to Risk-Based Criteria
SWMU 14: Fill Materials Block 11

Constituent	Maximum Detected Concentration (mg/kg) (1)	Maximum Detection Limit for Non-Detects (mg/kg)	Frequency of Detection	EPA Region III Risk-Based Concentrations for Soil (mg/kg)		USEPA Soil Screening Level (mg/kg)	Maximum Detection Exceeds Criteria	Maximum Detection Limit for Non-Detects Exceeds Criteria
				Industrial	Residential			
SEMIVOLATILES (cont.)								
N-Nitrosodipropylamine	ND	< 12.1	0 / 9	0.82	0.091	0.00005	No	> IND, RES, SSL
Nitrobenzene	23.5	< 11.4	1 / 9	1000	39	0.1	> SSL	> SSL
o,p-Toluidine	ND	< 61.5	0 / 9	30	3.4	--	No	> IND, RES
o-Nitrotoluene	22.4	< 11.4	1 / 9	20000	780	--	No	No
p-Chloroaniline	3.21	< 12.1	2 / 9	8200	310	0.7	> SSL	> SSL
p-Nitrotoluene	18.2	< 17.1	1 / 9	20000	780	--	No	No
Pentachloronitrobenzene	ND	< 12.1	0 / 9	22	2.5	--	No	> RES
Pentachlorophenol	ND	< 12.1	0 / 9	48	5.3	0.03	No	> RES, SSL
Phenol	4.25	< 7.23	1 / 9	1000000	47000	100	No	No

(1) "mg/kg" - Units reported in milligrams per kilogram (equivalent to parts per million) unless otherwise noted.

(2) ND - Not detected.

(3) NA - Not applicable.

(4) "J" - Estimated value.

--" - Value not available for this constituent.

TABLE 4.7-3
Site-Specific Soil Screening
SWMU 14: Fill Materials Block 11

Constituent	Maximum Detected Concentration (mg/kg) ⁽¹⁾	Maximum Detection Limit for Non-Detects (mg/kg)	Site-Specific SSL ⁽²⁾ (mg/kg)	Maximum Detect Exceeds Site-Specific SSL	Maximum Detection Limit Exceeds Site-Specific SSL
VOLATILES					
1,1,2-Tetrachloroethane	ND ⁽³⁾	< 0.16	0.0061	NA ⁽⁵⁾	Yes
1,1,2-Trichloroethane	ND	< 0.31	1.8	NA	No
1,1-Dichloroethene	ND	< 0.31	4.5	NA	No
1,2-Dichloroethane	ND	< 0.31	1.8	NA	No
1,2-Dichloropropane	ND	< 0.47	2.7	NA	No
Benzene	0.52 J ⁽⁴⁾	< 0.16	3.2	No	No
Bromomethane	ND	< 0.47	2.8	NA	No
Carbon Tetrachloride	ND	< 0.16	7.2	NA	No
Chlorobenzene	13.6	< 0.16	68	No	No
cis-1,3-Dichloropropene	ND	< 0.16	0.043	NA	Yes
Methylene Chloride	ND	< 0.31	1.6	NA	No
Tetrachloroethene	ND	< 0.16	6.5	NA	No
trans-1,3-Dichloropropene	ND	< 0.16	0.043	NA	Yes
Trichloroethene	0.75	< 0.16	6.9	No	No
Vinyl Chloride	ND	< 0.31	0.75	NA	No
SEMOVOLATILES					
1,2,3-Trichlorobenzene	ND	< 14.5	870	NA	No
1,2,4-Trichlorobenzene	ND	< 12.1	870	NA	No
1,2-Dichlorobenzene	339	< 2.13	270	Yes	No
1,4-Dichlorobenzene	28.4	< 11.4	330	No	No
2,4,6-Trichlorophenol	ND	< 12.1	17	NA	No
2,4-Dichlorophenol	ND	< 12.1	140	NA	No
2,4-Dimethylphenol	ND	< 12.1	1200	NA	No
2,4-Dinitrophenol	ND	< 74.7	68	NA	No
2,4-Dinitrotoluene	78	< 11.4	65	Yes	No
2,6-Dinitrotoluene	17.7	< 11.4	27	No	No
2-Chlorophenol	ND	< 12.1	520	NA	No
3,3'-Dichlorobenzidine	ND	< 73.5	0.78	NA	Yes
Benzo(a)anthracene	ND	< 15.7	250	NA	No
Benzo(a)pyrene	ND	< 12.1	14000	NA	No
Benzo(b)fluoranthene	ND	< 12.1	770	NA	No
Bis(2-chloroethyl)ether	ND	< 12.1	0.0032	NA	Yes
Carbazole	ND	< 60.2	79	NA	No
Dibenz(a,h)anthracene	ND	< 12.1	240	NA	No
Hexachlorobenzene	ND	< 12.1	380	NA	No
Hexachlorobutadiene	ND	< 12.1	370	NA	No
Hexachloroethane	ND	< 12.1	9.3	NA	Yes
Isophorone	ND	< 12.1	40	NA	No
N-Nitrosodiphenylamine	ND	< 15.7	130	NA	No
N-Nitrosodipropylamine	ND	< 12.1	0.0039	NA	Yes
Nitrobenzene	23.5	< 11.4	2.3	Yes	Yes
p-Chloroaniline	3.21	< 12.1	100	No	No
Pentachlorophenol	ND	< 12.1	4.3	NA	Yes

⁽¹⁾ "mg/kg" - Milligrams per kilogram (equivalent to parts per million) unless otherwise noted.

⁽²⁾ "SSL" - Soil Screening Level

⁽³⁾ ND - Not detected.

⁽⁴⁾ "J" - Estimated value.

⁽⁵⁾ NA - Not applicable.

4.8 SWMU 17: Polyol Area

SWMU 17 (Polyol Area) is located on the southern side of Block 24. A release of TDA occurred in May 1994 while transferring polyol from a tank truck to a storage tank. Approximately 15 gallons of TDA was released to a concrete pad and 5 gallons was released to the adjoining gravel-covered ground surface. The spill was contained using oil dry. TDA is a dark brown solid at ambient temperature but is a liquid when heated. The spilled material was released as a liquid and quickly cooled forming a solid or viscous liquid, which could be shoveled. The contained product and affected soil/gravel were placed in 55-gallons drums and subsequently managed via disposal at a regulated off-site facility.

A single roll-off bin is located at this site to collect polyol filter cake. The filter cake consists of a potassium sulfate salt and polyol. This bin is emptied every other week. The filter cake is a non-hazardous waste. There have been no spill reports or bin failures. This area now has a curb and any spills would be directed to a process trench.

Historically, the waste from the polyol laboratory was collected in two 55-gallon drums, one for isocyanates and one for used glassware. This practice ceased several years ago when the polyol laboratory was relocated to the control lab area.

4.8.1 RFI Scope of Work

The RFI scope of work included a soil gas survey performed during Phase 1 and soil sampling performed during Phase 2.

4.8.1.1 Phase 1 Scope Work

Soil Gas Survey

Total VOC concentrations in soil gas are considered to be elevated if found above 100 µg/L. This is considered to be a conservative cut-off and was derived after several years of comparing actual soil chemistry results with soil gas results. Total VOC concentrations were not encountered above 100 µg/L in either the 2.5 ft-bgs or 7.5 ft-bgs intervals (Figures C-7 and C-8 in Appendix C).

4.8.2 Phase 2 Scope of Work

The scope of work for Phase 2 was based on the discussion of the Polyol Area presented in the Description of Current Conditions report (ICF Kaiser, February, 1995). Two test borings were installed for the purpose of collecting samples for laboratory and geotechnical analysis.

Borings SM017-TB01 and -TB02 were drilled to 5 ft-bgs. Samples for laboratory analysis were collected at the surface immediately below the asphalt pavement (0.5 to 1 ft-bgs) and the shallow subsurface (3 to 5 ft-bgs). There were no additional samples taken from either boring due to elevated OVM readings, visual contamination, or perched water zones. The samples were submitted for analysis of SVOCs, metals, VOCs and TOCs. Table 4.8-1 presents the complete soil analytical results for SWMU 17 and Figure 4.8-1 provides selected soil analytical results on a plan view map.

Shelby Tube samples for geotechnical analysis were collected from twin borings drilled beside SM017-TB01 and -TB02. One sample was taken from the 3 to 5 ft-bgs interval of -TB01 and the second from the 0.5 to 2.5 ft-bgs interval of -TB02. Both samples were marked for sieve, hydrometer, and bulk density analyses.

4.8.3 Field Observations

The boring logs for SWMU 17 (Appendix D) indicate that subsurface materials encountered during Phase 2 in both SM017-TB01 and SM017-TB02 are 0.4-feet of asphalt pavement covering 1-ft of crushed stone and sandy silt fill material, followed by sandy clay to depth. The alluvial aquifer was not reached in either of these borings, nor were organic vapors detected in either of these borings.

4.8.4 Risk Assessment Results

4.8.4.1 Comparison to Risk-based Criteria

Table 4.8-1 provides the complete analytical results for SWMU 17, and Figure 4.8-1 summarizes the analytical results on a plan view map. Table 4.8-2 presents a summary of all detected constituents at SWMU 17, and constituents with maximum detections or detection limits exceeding the screening criteria. In addition to maximum detected concentrations and detection limits, Table 4.8-2 also presents frequency of detection, USEPA risk-based screening criteria, default soil to groundwater SSLs (dilution attenuation factor of 20), and comparisons to the

screening criteria. Bayer has been designated as an industrial facility; therefore, industrial soil RBCs are applicable for RFI decisions. Residential soil RBCs are presented to fulfill USEPA Region III documentation requirements.

No constituents have maximum detection concentrations that exceed the Region III RBCs for either industrial or residential soils. Nine organic constituents, however, have maximum detection limits that exceed the Region III RBCs for both industrial and residential soils, and 11 organics have maximum detection limits that exceed the RBCs for residential soils only.

As indicated on Table 4.8-2, no constituents have maximum detected concentrations that exceed the default USEPA SSLs. However, 29 organic constituents have maximum detection limits that exceed the default USEPA SSLs.

4.8.4.2 Site Specific Soil Screening Levels

SSLs were derived for SWMU 17 using site-specific data to further evaluate if the constituents that have detection limits exceeding the default USEPA SSLs could have the potential to migrate from soil to groundwater at levels of concern. Site-specific SSLs were calculated for each constituent with a detection limit that exceeds the default USEPA SSL. Maximum detection limits of constituents were then compared to the site-specific SSLs.

Table 4.8-3 presents the resulting SSLs, along with the maximum detection limits and an indication of whether the maximum detection limit exceeds the site-specific SSL. As indicated in Table 4.8-3, three VOCs (1,1,2,2-tetrachloroethane, cis-1,3-dichloropropene, and trans-1,3-dichloropropene) and three SVOCs (3,3'-dichlorobenzidine, bis(2-chloroethyl)ether, and N-nitrosodipropylamine,) have detection limits that exceed the site-specific SSLs.

4.8.4.3 Site Specific Analysis

The above results indicate that no further action is necessary for SWMU 17. The reasons for assigning this SWMU to the NFA category include:

- There are no constituents detected at this SWMU with concentrations that exceed the industrial or residential RBCs or the default USEPA SSLs.
- Although a number of organic constituents had detection limits that exceed either the industrial RBC or site-specific SSL, the detection limits appear to be reasonable, are not

elevated, and are unlikely to mask significant concentrations of these constituents. In most cases where samples had constituents with detection limits that exceeded the industrial RBCs or site-specific SSLs, these constituents were never detected in any sample, but the detection limits for all samples were greater than the industrial RBCs or site-specific SSLs. In a few cases (2,4-toluenediamine, benzo(a)pyrene, dibenzo(a,h)anthracene, and n-nitrosodipropylamine), the industrial RBC or site-specific SSL was between 0.5 mg/kg and 2.0 mg/kg, and only one sample (SM017-TB02-001) had a detection limit that was slightly greater than the industrial RBC or site-specific SSL. In addition, the constituents generally had detection limits that were not significantly above the method detection limits, except in the one sample, SM017-TB02-0001. The detection limits for SVOCs in this sample were about 5-times the method detection limits. However, sample SM017-TB02-0001 was diluted 5-times during analysis, to quantify the detection of di-n-butyl phthalate. Therefore, the detection limits appear reasonable.

4.8.5 Discussion with USEPA

Bayer discussed the Phase 2 analytical results and the appropriate course of action for SWMU 17 with USEPA on February 14, 1999. USEPA concurred with Bayer that no further action is required at this SWMU.

4.8.6 Conclusions and Recommendations

There are no constituents with maximum detections that exceed the industrial or residential RBCs. Therefore, there is no concern related to the soil contact pathways.

Comparison of the soil analytical data to the default SSLs indicates no constituents were detected with concentrations that exceed the default SSLs. Therefore, there is no concern related to migration of detected constituents from soil to groundwater at this SWMU. All detection limits for undetected constituents are considered reasonable and are not likely to mask significant concentrations of any constituents.

As a result, no further action is warranted for SWMU 17. USEPA concurred with placing this SWMU in the no further action category during a February 14, 1999 conference call with Bayer.



SM017-TB01		
SAMPLE DEPTH (ft-kgs)	0.00-1.00	3.00-5.00
Freon 113	302 J	290 J
Bis(2-ethylhexyl) phthalate	< 270	< 540
Dl-n-butyl phthalate	5620	< 450
Cadmium	850	< 450
Chromium	15200	12200
Lead	14400	10900
Nickel	21400	22300

SWMU 17

Block 24

SM017-TB01
SM017-TB02

SM017-TB02		
SAMPLE DEPTH (ft-kgs)	0.00-1.00	3.00-5.00
Freon 113	< 267	296 J
Bis(2-ethylhexyl) phthalate	< 1280	1000 J
Dl-n-butyl phthalate	1420 B	1850 J
Cadmium	600	860
Chromium	9330	18400
Lead	8670	15700
Nickel	15900	23300

SWMU 18

NOTES:

1. "D" DENOTES DUPLICATE SAMPLE
"FD" DENOTES FIELD DUPLICATE SAMPLE
"J" DENOTES ESTIMATED VALUE
"K" DENOTES ESTIMATED VALUE BIASED HIGH
"L" DENOTES ESTIMATED VALUE BIASED LOW
"B" DENOTES DETECTED IN LABORATORY BLANKS
"NA" DENOTES NOT ANALYZED
"RS" DENOTES RESAMPLED
2. "<" DENOTES NOT DETECTED AT INDICATED DETECTION LIMIT
3. TEST BORING LOCATIONS WERE LOCATED BY PARSONS SURVEYING.

LEGEND:

SM017-TB02



TEST BORING LOCATION



SWMU BOUNDARY (MODIFIED)

SCALE
0 100 200 FEET

BORING	
DEPTH	X PARAMETER

DEPTH BELOW GROUND
GROUND IN FEET
ANALYTICAL RESULTS IN ug/kg

FIGURE 4.8-1

BAYER CORPORATION
NEW MARTINSVILLE, WV FACILITY

SOIL BORING LOCATIONS WITH ANALYTICAL
RESULTS FOR SWMU 17

IT Corporation

DATE: 12/4/01	DR.: B. SNYDER
SCALE: AS NOTED	FILE NAME: 800588-A5

TABLE 4.8-1
Soil Analytical Results for SWMU 17: Polyol Area

SAMPLE ID	SM017-TB01-0001	SM017-TB01-0305	SM017-TB02-0001	SM017-TB02-0305
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB01	TB01	TB02	TB02
SAMPLE DATE	7/2/1997	7/2/1997	7/2/1997	7/2/1997
PARAMETER				
Volatile (µg/kg)				
1,1,1,2-Tetrachloroethane	< 280	< 250	< 267	< 296
1,1,1-Trichloroethane	< 145	< 130	< 139	< 154
1,1,2,2-Tetrachloroethane	< 145	< 130	< 139	< 154
1,1,2-Trichloroethane	< 280	< 250	< 267	< 296
1,1-Dichloroethane	< 145	< 130	< 139	< 154
1,1-Dichloroethene	< 280	< 250	< 267	< 296
1,1-Dichloropropene	< 145	< 130	< 139	< 154
1,2,3-Trichlorobenzene (VOAS)	< 145	< 130	< 139	< 154
1,2,3-Trichloropropane	< 145	< 130	< 139	< 154
1,2,4-Trichlorobenzene (VOAS)	< 145	< 130	< 139	< 154
1,2,4-Trimethylbenzene	< 145	< 130	< 139	< 154
1,2-Dibromo-3-chloropropane	< 280	< 250	< 267	< 296
1,2-Dibromoethane	< 145	< 130	< 139	< 154
1,2-Dichlorobenzene (VOAS)	< 280	< 250	< 267	< 296
1,2-Dichloroethane	< 280	< 250	< 267	< 296
1,2-Dichloropropane	< 425	< 380	< 406	< 450
1,3,5-Trimethylbenzene	< 145	< 130	< 139	< 154
1,3-Dichlorobenzene (VOAS)	< 280	< 250	< 267	< 296
1,3-Dichloropropane	< 145	< 130	< 139	< 154
1,4-Dichlorobenzene (VOAS)	< 280	< 250	< 267	< 296
2,2-Dichloropropane	< 145	< 130	< 139	< 154
2-Butanone	< 984	< 880	< 939	< 1040
2-Chloroethyl Vinyl Ether	< 280	< 250	< 267	< 296
2-Chlorotoluene	< 145	< 130	< 139	< 154
2-Hexanone	< 425	< 380	< 406	< 450
4-Chlorotoluene	< 145	< 130	< 139	< 154
4-Methyl-2-pentanone	< 425	< 380	< 406	< 450
Acetone	< 984	< 880	< 939	< 1040
Acrolein	< 2800	< 2500	< 2670	< 2960
Acrylonitrile	< 1450	< 1300	< 1390	< 1540
Allyl Chloride	< 145	< 130	< 139	< 154
Benzene	< 145	< 130	< 139	< 154
Bromobenzene	< 145	< 130	< 139	< 154
Bromochloromethane	< 145	< 130	< 139	< 154
Bromodichloromethane	< 280	< 250	< 267	< 296
Bromoform	< 145	< 130	< 139	< 154
Bromomethane	< 425	< 380	< 406	< 450
Carbon Disulfide	< 425	< 380	< 406	< 450
Carbon Tetrachloride	< 145	< 130	< 139	< 154
Chlorobenzene	< 145	< 130	< 139	< 154
Chloroethane	< 425	< 380	< 406	< 450
Chloroform	< 145	< 130	< 139	< 154
Chloromethane	< 280	< 250	< 267	< 296
Dibromochloromethane	< 145	< 130	< 139	< 154
Dibromomethane	< 145	< 130	< 139	< 154
Dichlorodifluoromethane	< 280	< 250	< 267	< 296
Ethyl Methacrylate	< 145	< 130	< 139	< 154
Ethylbenzene	< 145	< 130	< 139	< 154

TABLE 4.8-1
Soil Analytical Results for SWMU 17: Polyol Area

SAMPLE ID	SM017-TB01-0001	SM017-TB01-0305	SM017-TB02-0001	SM017-TB02-0305
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB01	TB01	TB02	TB02
SAMPLE DATE	7/2/1997	7/2/1997	7/2/1997	7/2/1997
PARAMETER				
Freon 113	302 J	290 J	< 267	296 J
Freon 141b	< 145	< 130	< 139	< 154
Hexachlorobutadiene (VOAS)	< 280	< 250	< 267	< 296
Isopropylbenzene	< 425	< 380	< 406	< 450
Methyl Iodide	< 425	< 380	< 406	< 450
Methylene Chloride	< 280	< 250	< 267	< 296
Naphthalene (VOAS)	< 145	< 130	< 139	< 154
Styrene	< 145	< 130	< 139	< 154
Tetrachloroethene	< 145	< 130	< 139	< 154
Toluene	< 145	< 130	< 139	< 154
Trichloroethene	< 145	< 130	< 139	< 154
Trichlorofluoromethane	< 280	< 250	< 267	< 296
Vinyl Acetate	< 425	< 380	< 406	< 450
Vinyl Chloride	< 280	< 250	< 267	< 296
cis-1,2-Dichloroethene	< 280	< 250	< 267	< 296
cis-1,3-Dichloropropene	< 145	< 130	< 139	< 154
m+p-Xylene	< 145	< 130	< 139	< 154
n-Butylbenzene	< 145	< 130	< 139	< 154
n-Propylbenzene	< 145	< 130	< 139	< 154
o-Xylene	< 145	< 130	< 139	< 154
p-Isopropyltoluene	< 145	< 130	< 139	< 154
sec-Butylbenzene	< 145	< 130	< 139	< 154
tert-Butylbenzene	< 145	< 130	< 139	< 154
trans-1,2-Dichloroethene	< 280	< 250	< 267	< 296
trans-1,3-Dichloropropene	< 145	< 130	< 139	< 154
trans-1,4-Dichloro-2-butene	< 1450	< 1300	< 1390	< 1540
Semivolatiles (µg/kg)				
1,2,3-Trichlorobenzene (SVOA)	< 270	< 540	< 1280	< 280 J
1,2,4,5-Tetrachlorobenzene	< 270	< 540	< 1280	< 280 J
1,2,4-Trichlorobenzene (SVOA)	< 220	< 450	< 1070	< 240 J
1,2-Dichlorobenzene (SVOA)	< 220	< 450	< 1070	< 240 J
1,3-Dichlorobenzene (SVOA)	< 220	< 450	< 1070	< 240 J
1,4-Dichlorobenzene (SVOA)	< 220	< 450	< 1070	< 240 J
1-Chloronaphthalene	< 560	< 1130	< 2670	< 590 J
1-Methylnaphthalene	< 220	< 450	< 1070	< 240 J
1-Naphthylamine	< 760	< 1540	< 3630	< 800 J
2,3,4,6-Tetrachlorophenol	< 450	< 910	< 2130	< 470 J
2,3-Dichloroaniline	< 220	< 450	< 1070	< 240 J
2,4,5-Trichlorophenol	< 220	< 450	< 1070	< 240 J
2,4,6-Trichlorophenol	< 220	< 450	< 1070	< 240 J
2,4-Dichlorophenol	< 220	< 450	< 1070	< 240 J
2,4-Dimethylphenol	< 220	< 450	< 1070	< 240 J
2,4-Dinitrophenol	< 1390	< 2810	< 6620	< 1470 J
2,4-Dinitrotoluene	< 220	< 450	< 1070	< 240 J
2,4-Toluenediamine	< 1120	< 2270	< 5340	< 1180 J
2,6-Dichlorophenol	< 220	< 450	< 1070	< 240 J
2,6-Dinitrotoluene	< 220	< 450	< 1070	< 240 J
2-Choronaphthalene	< 220	< 450	< 1070	< 240 J
2-Chlorophenol	< 220	< 450	< 1070	< 240 J
2-Methylnaphthalene	< 220	< 450	< 1070	< 240 J
2-Naphthylamine	< 850	< 1720	< 4060	< 900 J

TABLE 4.8-1
Soil Analytical Results for SWMU 17: Polyol Area

SAMPLE ID	SM017-TB01-0001	SM017-TB01-0305	SM017-TB02-0001	SM017-TB02-0305
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB01	TB01	TB02	TB02
SAMPLE DATE	7/2/1997	7/2/1997	7/2/1997	7/2/1997
PARAMETER				
2-Nitroaniline	< 270	< 540	< 1280	< 280 J
2-Nitrodiphenylamine	< 220	< 450	< 1070	< 240 J
2-Nitrophenol	< 220	< 450	< 1070	< 240 J
2-Picoline	< 830	< 1680	< 3950	< 880 J
3,3'-Dichlorobenzidine	< 1360	< 2760	< 6510	< 1440 J
3-Methylcholanthrene	< 220	< 450	< 1070	< 240 J
3-Nitroaniline	< 220	< 450	< 1070	< 240 J
4,4' Methyleneedianiline	< 1970	< 3990	< 9390	< 2080 J
4,6-Dinitro-o-cresol	< 220	< 450	< 1070	< 240 J
4-Aminobiphenyl	< 220	< 450	< 1070	< 240 J
4-Aminodiphenylamine	< 560	< 1130	< 2670	< 590 J
4-Bromophenyl phenyl ether	< 220	< 450	< 1070	< 240 J
4-Chloro-m-cresol	< 220	< 450	< 1070	< 240 J
4-Chlorophenylphenyl ether	< 220	< 450	< 1070	< 240 J
4-Nitroaniline	< 220	< 450	< 1070	< 240 J
4-Nitrophenol	< 220	< 450	< 1070	< 240 J
5-Nitro-o-toluidine	< 220	< 450	< 1070	< 240 J
7,12-dimethylbenz[a]anthracene	< 220	< 450	< 1070	< 240 J
Acenaphthene	< 220	< 450	< 1070	< 240 J
Acenaphthylene	< 220	< 450	< 1070	< 240 J
Acetophenone	< 290	< 590	< 1390	< 310 J
Aniline	< 310	< 630	< 1490	< 330 J
Anthracene	< 220	< 450	< 1070	< 240 J
Azobenzene	< 270	< 540	< 1280	< 280 J
Benzidine	< 3580	< 7250	< 17100	< 3790 J
Benzo(a)anthracene	< 290	< 590	< 1390	< 310 J
Benzo(a)pyrene	< 220	< 450	< 1070	< 240 J
Benzo(b)fluoranthene	< 220	< 450	< 1070	< 240 J
Benzo(ghi)perylene	< 250	< 500	< 1170	< 260 J
Benzo(k)fluoranthene	< 220	< 450	< 1070	< 240 J
Benzoic Acid	< 220	< 450	< 1070	< 240 J
Benzyl Alcohol	< 220	< 450	< 1070	< 240 J
Benzyl butyl phthalate	< 220	< 450	< 1070	< 240 J
Bis(2-chloroethoxymethane)	< 220	< 450	< 1070	< 240 J
Bis(2-chloroethyl)ether	< 220	< 450	< 1070	< 240 J
Bis(2-chloroisopropyl)ether	< 220	< 450	< 1070	< 240 J
Bis(2-ethylhexyl) phthalate	< 270	< 540	< 1280	1000 J
Bisphenol A	< 400	< 820	< 1920	< 430 J
Carbazole	< 1120	< 2270	< 5340	< 1180 J
Chrysene	< 220	< 450	< 1070	< 240 J
Cyclohexanone	< 220	< 450	< 1070	< 240 J
Di-n-butyl phthalate	5620	< 450	1420 B	1850 J
Di-n-octyl phthalate	< 220	< 450	< 1070	< 240 J
Dibeno(a,h)anthracene	< 220	< 450	< 1070	< 240 J
Dibenzofuran	< 220	< 450	< 1070	< 240 J
Diethyl Phthalate	< 220	< 450	< 1070	< 240 J
Dimethylphthalate	< 220	< 450	< 1070	< 240 J
Ethyl Methane Sulfonate	< 400	< 820	< 1920	< 430 J

TABLE 4.8-1
Soil Analytical Results for SWMU 17: Polyol Area

SAMPLE ID	SM017-TB01-0001	SM017-TB01-0305	SM017-TB02-0001	SM017-TB02-0305
SAMPLE DEPTH(ft)	0.00-1.00	3.00-5.00	0.00-1.00	3.00-5.00
SAMPLE LOCATION	TB01	TB01	TB02	TB02
SAMPLE DATE	7/2/1997	7/2/1997	7/2/1997	7/2/1997
PARAMETER				
Fluoranthene	< 220	< 450	< 1070	< 240 J
Fluorene	< 220	< 450	< 1070	< 240 J
Heptachlor	R	< 500	< 1170	< 260 J
Hexachlorobenzene	< 220	< 450	< 1070	< 240 J
Hexachlorobutadiene (SVOA)	< 220	< 450	< 1070	< 240 J
Hexachlorocyclopentadiene	< 220	< 450	< 1070	< 240 J
Hexachloroethane	< 220	< 450	< 1070	< 240 J
Indeno(1,2,3-cd)pyrene	< 220	< 450	< 1070	< 240 J
Isophorone	< 220	< 450	< 1070	< 240 J
Methyl methane sulfonate	< 220	< 450	< 1070	< 240 J
N-Nitrosodibutylamine	< 220	< 450	< 1070	< 240 J
N-Nitrosodimethylamine	< 220	< 450	< 1070	< 240 J
N-Nitrosodiphenylamine	< 290	< 590	< 1390	< 310 J
N-Nitrosodipropylamine	< 220	< 450	< 1070	< 240 J
N-Nitrosopiperidine	< 220	< 450	< 1070	< 240 J
Naphthalene (SVOA)	< 220	< 450	< 1070	< 240 J
Nitrobenzene	< 220	< 450	< 1070	< 240 J
Pentachlorobenzene	< 380	< 770	< 1810	< 400 J
Pentachloronitrobenzene	< 220	< 450	< 1070	< 240 J
Pentachlorophenol	< 220	< 450	< 1070	< 240 J
Phenacetin	< 220	< 450	< 1070	< 240 J
Phenanthrene	< 220	< 450	< 1070	< 240 J
Phenol	< 130	< 270	< 640	< 140 J
Pyrene	< 220	< 450	< 1070	< 240 J
Pyridine	< 250	< 500	< 1170	< 260 J
Trimethylphosphate	< 220	< 450	< 1070	< 240 J
Triphenylphosphate	< 1120	< 2270	< 5340	< 1180 J
m,p-Cresol	< 340	< 680	< 1600	< 350 J
m-Nitrotoluene	< 220	< 450	< 1070	< 240 J
m-Tolidine	< 450	< 910	< 2130	< 470 J
o,p-Tolidine	< 1140	< 2310	< 5440	< 1210 J
o-Cresol	< 220	< 450	< 1070	< 240 J
o-Nitrotoluene	< 220	< 450	< 1070	< 240 J
p-Chloroaniline	< 220	< 450	< 1070	< 240 J
p-Dimethylaminoazobenzene	< 220	< 450	< 1070	< 240 J
p-Nitrotoluene	< 340	< 680	< 1600	< 350 J
Metals (µg/kg)				
Antimony	< 447	< 453	< 427	< 473
Cadmium	850	< 450	600	860
Chromium	15200	12200	9330	18400
Lead	14400	10900	8670	15700
Nickel	21400	22300	15900	23300
Miscellaneous (µg/kg)				
Percent Moisture	11 %	NA	6.3 %	16 %
Total Organic Carbon	NA	NA	5400000	4400000

B=Blank Contamination

J=Estimated Value

NA=Not Analyzed

R=Data Rejected for Quality Reasons

TABLE 4.8-2
Comparison to Risk-Based Criteria
SWMU 17: Polyol Area

Constituent	Maximum Detected Concentration (mg/kg) (1)	Maximum Detection Limit for Non-Detects (mg/kg)	Frequency of Detection	EPA Region III Risk-Based Concentrations for Soil (mg/kg)		USEPA Soil Screening Level (mg/kg)	Maximum Detection Exceeds Criteria	Maximum Detection Limit for Non-Detects Exceeds Criteria
				Industrial	Residential			
MISCELLANEOUS								
Total Organic Carbon	5400	NA (2)	2 / 2	--	--	--	No	No
METALS								
Cadmium	0.86	< 0.45	3 / 4	1000	39	8	No	No
Chromium	18.4	NA	4 / 4	10000	390	38	No	No
Lead	15.7	NA	4 / 4	800	400	--	No	No
Nickel	23.3	NA	4 / 4	41000	1600	130	No	No
VOLATILES								
1,1,2,2-Tetrachloroethane	ND (3)	< 0.15	0 / 4	29	3.2	0.003	No	> SSL
1,1,2-Trichloroethane	ND	< 0.3	0 / 4	100	11	0.02	No	> SSL
1,1-Dichloroethene	ND	< 0.3	0 / 4	9.5	1.1	0.06	No	> SSL
1,2,3-Trichloropropane	ND	< 0.15	0 / 4	0.82	0.091	--	No	> RES
1,2-Dibromoethane	ND	< 0.15	0 / 4	0.067	0.0075	--	No	> IND, RES
1,2-Dichloroethane	ND	< 0.3	0 / 4	63	7	0.02	No	> SSL
1,2-Dichloropropane	ND	< 0.45	0 / 4	84	9.4	0.03	No	> SSL
Acrylonitrile	ND	< 1.54	0 / 4	11	1.2	--	No	> RES
Benzene	ND	< 0.15	0 / 4	200	22	0.03	No	> SSL
Bromomethane	ND	< 0.45	0 / 4	2900	110	0.2	No	> SSL
Carbon Tetrachloride	ND	< 0.15	0 / 4	44	4.9	0.07	No	> SSL
cis-1,3-Dichloropropene	ND	< 0.15	0 / 4	33	3.7	0.004	No	> SSL
Freon 113	0.3 J (4)	< 0.27	3 / 4	410000	16000	--	No	No
Methylene Chloride	ND	< 0.3	0 / 4	760	85	0.02	No	> SSL
Tetrachloroethene	ND	< 0.15	0 / 4	110	12	0.06	No	> SSL
trans-1,3-Dichloropropene	ND	< 0.15	0 / 4	33	3.7	0.004	No	> SSL
Trichloroethene	ND	< 0.15	0 / 4	520	58	0.06	No	> SSL
Vinyl Chloride	ND	< 0.3	0 / 4	3	0.34	0.01	No	> SSL
SEMITOTALS								
1-Naphthylamine	ND	< 3.63	0 / 4	0.044	0.0049	--	No	> IND, RES
2,4,6-Trichlorophenol	ND	< 1.07	0 / 4	520	58	0.2	No	> SSL
2,4-Dichlorophenol	ND	< 1.07	0 / 4	6100	230	1	No	> SSL
2,4-Dinitrophenol	ND	< 6.62	0 / 4	4100	160	0.3	No	> SSL
2,4-Dinitrotoluene	ND	< 1.07	0 / 4	4100	160	0.0008	No	> SSL
2,4-Toluenediamine	ND	< 5.34	0 / 4	1.8	0.2	--	No	> IND, RES
2,6-Dinitrotoluene	ND	< 1.07	0 / 4	2000	78	0.0007	No	> SSL
2-Naphthylamine	ND	< 4.06	0 / 4	0.044	0.0049	--	No	> IND, RES
3,3'-Dichlorobenzidine	ND	< 6.51	0 / 4	13	1.4	0.007	No	> RES, SSL
Benzidine	ND	< 17.1	0 / 4	0.025	0.0028	--	No	> IND, RES
Benzo(a)anthracene	ND	< 1.39	0 / 4	7.8	0.88	2	No	> RES
Benzo(a)pyrene	ND	< 1.07	0 / 4	0.78	0.088	8	No	> IND, RES

TABLE 4.8-2
Comparison to Risk-Based Criteria
SWMU 17: Polyol Area

Constituent	Maximum Detected Concentration (mg/kg) (1)	Maximum Detection Limit for Non-Detects (mg/kg)	Frequency of Detection	EPA Region III Risk-Based Concentrations for Soil (mg/kg)		USEPA Soil Screening Level (mg/kg)	Maximum Detection Exceeds Criteria	Maximum Detection Limit for Non-Detects Exceeds Criteria
				Industrial	Residential			
SEMICVOLATILES (cont.)								
Benzo(b)fluoranthene	ND	< 1.07	0 / 4	7.8	0.88	5	No	> RES
Bis(2-chloroethyl)ether	ND	< 1.07	0 / 4	5.2	0.58	0.0004	No	> RES, SSL
Bis(2-ethylhexyl) phthalate	1.0 J	< 1.28	1 / 4	410	46	3600	No	No
Carbazole	ND	< 5.34	0 / 4	290	32	0.6	No	> SSL
Di-n-butyl phthalate	5.62	< 0.45	3 / 4	200000	7800	2300	No	No
Dibenzo(a,h)anthracene	ND	< 1.07	0 / 4	0.78	0.088	2	No	> IND, RES
Heptachlor	ND	< 1.17	0 / 3	1.3	0.14	23	No	> RES
Hexachlorobenzene	ND	< 1.07	0 / 4	3.6	0.4	2	No	> RES
Hexachloroethane	ND	< 1.07	0 / 4	410	46	0.5	No	> SSL
Indeno(1,2,3-cd)pyrene	ND	< 1.07	0 / 4	7.8	0.88	14	No	> RES
Isophorone	ND	< 1.07	0 / 4	6000	670	0.5	No	> SSL
N-Nitrosodibutylamine	ND	< 1.07	0 / 4	1.1	0.12	--	No	> RES
N-Nitrosodimethylamine	ND	< 1.07	0 / 4	0.11	0.013	--	No	> IND, RES
N-Nitrosodiphenylamine	ND	< 1.39	0 / 4	1200	130	1	No	> SSL
N-Nitrosodipropylamine	ND	< 1.07	0 / 4	0.82	0.091	0.00005	No	> IND, RES, SSL
Nitrobenzene	ND	< 1.07	0 / 4	1000	39	0.1	No	> SSL
o,p-Toluidine	ND	< 5.44	0 / 4	30	3.4	--	No	> RES
p-Chloroaniline	ND	< 1.07	0 / 4	8200	310	0.7	No	> SSL
Pentachlorophenol	ND	< 1.07	0 / 4	48	5.3	0.03	No	> SSL

(1) "mg/kg" - Units reported in milligrams per kilogram (equivalent to parts per million) unless otherwise noted.

(2) NA - Not applicable.

(3) ND - Not detected.

(4) "J" - Estimated value.

--" - Value not available for this constituent.

TABLE 4.8-3
Site-Specific Soil Screening
SWMU 17: Polyol Area

Constituent	Maximum Detected Concentration (mg/kg) ⁽¹⁾	Maximum Detection Limit for Non-Detects (mg/kg)	Site-Specific SSL ⁽²⁾ (mg/kg)	Maximum Detect Exceeds Site-Specific SSL	Maximum Detection Limit Exceeds Site-Specific SSL
VOLATILES					
1,1,2,2-Tetrachloroethane	ND ⁽³⁾	< 0.15	0.046	NA ⁽⁴⁾	Yes
1,1,2-Trichloroethane	ND	< 0.3	1.8	NA	No
1,1-Dichloroethene	ND	< 0.3	4.5	NA	No
1,2-Dichloroethane	ND	< 0.3	1.8	NA	No
1,2-Dichloropropane	ND	< 0.45	2.7	NA	No
Benzene	ND	< 0.15	3.2	NA	No
Bromomethane	ND	< 0.45	2.8	NA	No
Carbon Tetrachloride	ND	< 0.15	7.2	NA	No
cis-1,3-Dichloropropene	ND	< 0.15	0.043	NA	Yes
Méthylène Chloride	ND	< 0.3	1.6	NA	No
Tetrachloroethene	ND	< 0.15	6.5	NA	No
trans-1,3-Dichloropropene	ND	< 0.15	0.043	NA	Yes
Trichloroethene	ND	< 0.15	6.9	NA	No
Vinyl Chloride	ND	< 0.3	0.75	NA	No
SEMOVOLATILES					
2,4,6-Trichlorophenol	ND	< 1.07	17	NA	No
2,4-Dichlorophenol	ND	< 1.07	140	NA	No
2,4-Dinitrophenol	ND	< 6.62	68	NA	No
2,4-Dinitrotoluene	ND	< 1.07	65	NA	No
2,6-Dinitrotoluene	ND	< 1.07	27	NA	No
3,3'-Dichlorobenzidine	ND	< 6.51	0.78	NA	Yes
Bis(2-chloroethyl)ether	ND	< 1.07	0.0032	NA	Yes
Carbazole	ND	< 5.34	79	NA	No
Hexachloroethane	ND	< 1.07	9.29	NA	No
Isophorone	ND	< 1.07	40.1	NA	No
N-Nitrosodiphenylamine	ND	< 1.39	130	NA	No
N-Nitrosodipropylamine	ND	< 1.07	0.0039	NA	Yes
Nitrobenzene	ND	< 1.07	2.33	NA	No
p-Chloroaniline	ND	< 1.07	100	NA	No
Pentachlorophenol	ND	< 1.07	4.28	NA	No

⁽¹⁾ "mg/kg" - Milligrams per kilogram (equivalent to parts per million) unless otherwise noted.

⁽²⁾ "SSL" - Soil Screening Level.

⁽³⁾ ND - Not detected.

⁽⁴⁾ NA - Not applicable.